

49. (Twice Amended) A stent in a non-expanded state, comprising:

a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a first connecting strut column formed of a plurality of first connecting struts, the first connecting struts including multiple linear sections, wherein the first connecting strut column couples the first expansion column to the second expansion column and a first expansion strut in the first expansion column is circumferentially offset from a corresponding second expansion strut of the second expansion column.

64. (Amended) The stent of claim 63, wherein at least a portion of the second connecting struts include a proximal section coupled to a distal section of a second expansion strut, a distal section coupled to a proximal section of a corresponding third expansion strut, a first linear section between the proximal and distal sections and a [third] strut angle.

67. (Amended) The stent of claim 63, wherein the portion of the second connecting struts including a [third] slant angle have a second linear section coupled to the first linear section and the third slant angle is formed between the first and second linear sections.

68. (Amended) The stent of claim 64, wherein the portion of the second connecting struts including the [third] slant angle have a second linear section coupled to the first linear section of the second connecting strut and the [third] slant angle is formed between the first and second linear sections.

69. (Amended) The stent of claim 68, wherein each [third strut] slant angle of the second connecting struts is directed in a second circumferential direction that is in an opposite direction of a first circumferential direction of [the first strut] a slant angle of the first connecting [strut] struts.

Please cancel without prejudice claims 75-83.

### REMARKS

Applicant thanks the Examiner for thoroughly reviewing the application. Amendments and remarks enclosed herein are intended to place all claims in the application in condition for allowance. Therefore, Applicant requests the Examiner's discretion in considering this response.

**1. Election/Restriction Requirement**

In the Office Action, the Examiner requested that the Applicant withdraw claims 4, 6, 8, 9. Applicant has withdrawn these claims, but requests reinstatement of the claims if the Examiner indicates claim 1 is in condition for allowance. Claim 1 is a genus that reads on a structure such as shown by FIG. 8C, and claims 4, 6, 8, 9 are species under claim 1.

While Applicant disagrees with the Examiner's assertions regarding claims 75-83, Applicant has cancelled these claims without prejudice to expedite prosecution of this application.

**2. Rejection Under 35 U.S.C. §112, Second Paragraph**

In the Office Action the Examiner rejected claims 10-12, 64, 67-69 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended these claims to specifically deal with the language that the Examiner found objectionable. Applicant respectfully requests reconsideration of these claims in light of these amendments.

**3. Rejection Under 35 U.S.C. §102(e)**

In the Office Action, the Examiner rejected claims 1-3, 7, 12, 17, 22-22 and 35 under 35 U.S.C. §102(e) as being anticipated by Pinchasik, et al. (U.S. Pat. No. 5,449,373). While Applicant disagrees with the applicability of Pinchasik, Applicant has amended each of the independent claims 1, 21, and 49 to recite at least one connecting strut in the connecting strut column to include multiple linear sections. Applicant submits that Pinchasik does not disclose linear connecting struts.

Further, Applicant requests reconsideration of claims 1, 21, and 49 because Pinchasik does not disclose a substantially linear joining strut connecting the expansion struts. In the Office Action, the Examiner stated that FIG. 3 of Pinchasik has "has *parts* to the joining struts 124 that are 'substantially linear' and non-perpendicular to the parallel struts." This characterization is not equivalent to "substantially linear joining strut", as recited in the

independent claims. Applicant notes that the Examiner's characterization is applicable to curved struts and straight struts alike.

Therefore, Applicant submits that claims 1-3, 7, 12, 17, 21, 22, and 35 are patentably distinct from Pinchasik.

The features mentioned above regarding the connecting struts and the joining struts of amended claims 1, 21, and 49 are repeated with respect to Orth. Therefore, Applicant submits that claims 1-3, 5, 10-13, 21, 22, 49, 60, and 63 are patentably distinct from Orth.

4. Rejection Under 35 U.S.C. §103(a)

Claims 19, 20, 65, 66 and 72 were rejected under 35 U.S.C. 103(a) as being unpatentable over Pinchasik, Orth or Israel, as applied above in view of Fischell et al., (U.S. 5,607,442). However, in light of the amendments made to claims 1, 21 and 49, Applicant submits that this rejection is now moot.

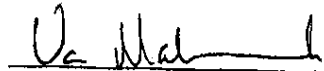
CONCLUSION

Applicant believes that the application is now in condition for allowance and respectfully requests issuance of a notice of allowance. However, if any issues remain, Applicant urges the Examiner to telephone Applicant's Attorney so that the application can be allowed in an expedited manner.

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI

By:



Van Mahamedi  
Reg. No. 42,828

650 Page Mill Road  
Palo Alto, California 94304  
(650) 493-9300  
Date: September 21, 1999

Please type a plus sign (+) inside this box: ☐Approved through 9/30/00. OMB 0651-0031  
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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	08/824,142	
	Filing Date	03/25/1999	
	First Named Inventor	Jang	
	Group Art Unit	3738	
	Examiner Name	Nguyen	
Total Number of Pages in This Submission	7	Attorney Docket Number	18461-702

## ENCLOSURES

<input type="checkbox"/> Fee Transmittal Form	Assignment Papers (for an Application)
<input checked="" type="checkbox"/> Authorization to Charge Deposit Account Below	Drawing(s)
<input checked="" type="checkbox"/> Amendment/Response	Revocation and Power of Attorney by Assignee
<input checked="" type="checkbox"/> After Final	Petition Routing Slip (PTO/SB/89) and Accompanying Petition
<input type="checkbox"/> Affidavits/declarations	To Convert a Provisional Application
<input type="checkbox"/> Extension of Time Request	Declaration of Inventor(s)
<input type="checkbox"/> Express Abandonment Request	Terminal Disclaimer
<input type="checkbox"/> Information Disclosure Statement	Small Entity Statement
<input type="checkbox"/> Certified Copy of Priority Document(s)	Request for Corrected Filing Receipt
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	After Allowance Communication to Group
	Appeal Communication to Board of Appeals and Interferences
	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
	Proprietary Information
	Status Letter
	Additional Enclosure(s) (please identify below):
	Remarks: THE COMMISSIONER IS AUTHORIZED TO CHARGE DEPOSIT ACCOUNT 23-2415 FOR ANY FEES IN CONNECTION WITH THIS CORRESPONDENCE

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual Name	Van Mahamedt, Reg. No. 42,828, WILSON SONSHI GOODRICH & ROSATI		
Signature	<i>Van Mahamedt</i>	Date	September 21, 1999

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail to: Assistant Commissioner for Patents, Washington, D.C. 20231, on		Date	September 21, 1999
Typed or printed name	Donna L. Hengst		
Signature	<i>Donna L. Hengst</i>	Date	September 21, 1999

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# **EXHIBIT 12**



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/624,142	03/25/97	JANG	D 17828-707

WM12/1013  
WILSON SONSINI GOODRICH ROSATI  
650 PAGE MILL ROAD  
PALO ALTO CA 94304-1050

EXAMINER

NGUYEN, D  
ART UNIT PAPER NUMBER

3738

DATE MAILED:

10/10/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Advisory Action</b>	Application No. <b>08/824,142</b>	Applicant(s) <b>Jang</b>	
	Examiner <b>Dinh Nguyen</b>	Group Art Unit <b>3738</b>	

THE PERIOD FOR RESPONSE: [check only a) or b)]

a) ☒ expires 3 months from the mailing date of the final rejection.

b) ☐ expires either three months from the mailing date of the final rejection, or on the mailing date of this Advisory Action, whichever is later. In no event, however, will the statutory period for the response expire later than six months from the date of the final rejection.

Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a), the proposed response and the appropriate fee. The date on which the response, the petition, and the fee have been filed is the date of the response and also the date for the purposes of determining the period of extension and the corresponding amount of the fee. Any extension fee pursuant to 37 CFR 1.17 will be calculated from the date of the originally set shortened statutory period for response or as set forth in b) above.

☐ Appellant's Brief is due two months from the date of the Notice of Appeal filed on \_\_\_\_\_ (or within any period for response set forth above, whichever is later). See 37 CFR 1.191(d) and 37 CFR 1.192(a).

Applicant's response to the final rejection, filed on Sep 24, 1999 has been considered with the following effect, but is NOT deemed to place the application in condition for allowance:

☒ The proposed amendment(s):

☐ will be entered upon filing of a Notice of Appeal and an Appeal Brief.

☒ will not be entered because:

☒ they raise new issues that would require further consideration and/or search. (See note below).

☐ they raise the issue of new matter. (See note below).

☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal.

☐ they present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: The linear sections as added in the proposed amendment requires further considerations and/or search.

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☐ Applicant's response has overcome the following rejection(s):

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☐ Newly proposed or amended claims \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment cancelling the non-allowable claims.

☐ The affidavit, exhibit or request for reconsideration has been considered but does NOT place the application in condition for allowance because:

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☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

☒ For purposes of Appeal, the status of the claims is as follows (see attached written explanation, if any):

Claims allowed: \_\_\_\_\_


Claims objected to: \_\_\_\_\_

Claims rejected: 1-3, 5, 7, 9-13, 17, 19-22, 49, 60, 63-69, and 72

☐ The proposed drawing correction filed on \_\_\_\_\_ ☐ has ☐ has not been approved by the Examiner.

☐ Note the attached Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Other \_\_\_\_\_

  
**Mickay Yu**  
 Supervisory Patent Examiner  
 Group 3700

# **EXHIBIT 13**





**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/824,142	03/25/97	JANG	D 17828-707

GM12/0207  
WILSON SONSINI GOODRICH ROSATI  
650 PAGE MILL ROAD  
PALO ALTO CA 94304-1050

EXAMINER

NGUYEN, D

ART UNIT	PAPER NUMBER
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3738

13

DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Notice of Abandonment</b>	Application No. <b>08/824,142</b>	Applicant(s) <b>Jang</b>
	Examiner <b>Dinh Nguyen</b>	Group Art Unit <b>3738</b>

This application is abandoned in view of:

☒ applicant's failure to timely file a proper response to the Office letter mailed on Jun 22, 1999.

☐ A response (with a Certificate of Mailing or Transmission of \_\_\_\_\_) was received on \_\_\_\_\_, which is after the expiration of the period for response (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.

☒ A proposed response was received on Sep 24, 1999, but it does not constitute a proper response to the final rejection.  
(A proper response to a final rejection consists only of: a timely filed amendment which places the application in condition for allowance; a Notice of Appeal; or the filing of a continuing application under 37 CFR 1.62 (FWC)).

☐ No response has been received.

☐ applicant's failure to timely pay the required issue fee within the statutory period of three months from the mailing date of the Notice of Allowance.

☐ The issue fee (with a Certificate of Mailing or Transmission of \_\_\_\_\_) was received on \_\_\_\_\_.

☐ The submitted issue fee of \$ \_\_\_\_\_ is insufficient. The issue fee required by 37 CFR 1.18 is \$ \_\_\_\_\_.

☐ The issue fee has not been received.

☐ applicant's failure to timely file new formal drawings as required in the Notice of Allowability.

☐ Proposed new formal drawings (with a Certificate of Mailing or Transmission of \_\_\_\_\_) were received on \_\_\_\_\_.

☐ The proposed new formal drawings filed \_\_\_\_\_ are not acceptable.

☐ No proposed new formal drawings have been received.

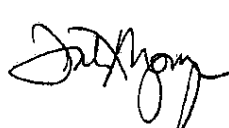
☐ the express abandonment under 37 CFR 1.62(g) in favor of the FWC application filed on \_\_\_\_\_.

☐ the letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

☐ the letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

☐ the decision by the Board of Patent Appeals and Interferences rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.

☐ the reason(s) below:

 1/3/00

# **EXHIBIT 14**

Practitioner's Docket No. 18461-702

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Inventors: G. David Jang  
 Application No.: 08/824,142  
 Filing Date: March 25, 1997  
 Title: Intravascular Stent

Group No.: 3738  
 Examiner: D. Nguyen

7/14

Assistant Commissioner for Patents  
 Washington, D.C. 20231  
 Office of the Assistant Commissioner for Patents

## PETITION FOR WITHDRAWAL OF ABANDONMENT

## PETITION

1. Applicant petitions that the abandonment set forth in the notice mailed by the Office on February 7, 2000 be withdrawn.

## SUBMISSION

2. Submitted herewith is:
- ☒ A copy of the complete response previously filed
  - ☐ A copy of the postcard identifying the papers filed and showing the USPTO receipt stamp
  - ☒ A copy of the first page of the response showing an executed Certificate of Mailing
  - ☒ A copy of the Express Mail Certificate No. showing the US Post Office receipt stamp
  - ☒ A copy of the Deposit Account Statement, in which items corresponding to the above is checked
3. Please proceed with further examination of this application on the basis of:
- ☐ The original papers filed, which have now reached the appropriate area.
  - ☒ The attached copies of the originally filed papers.

## PETITION FEE

4. The petition fee (37 C.F.R. section 1.17(h)) is paid as follows:  
 Charge Account No. 23-2415 (Docket No. 18461-702) the sum of \$130.

## REQUEST FOR REFUND OF PETITION FEE

5. As no defect exists in applicant's previous submission, a refund of the petition fee submitted herewith is respectfully requested.

## REQUEST FOR WITHDRAWAL OF ABANDONMENT

6. Acknowledgment of the active status of this application is respectfully requested.

## CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. section 1.8(a))

I hereby certify that, on the date shown below, this correspondence is being:

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- ☐ deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

## FACSIMILE

- ☐ transmitted by facsimile to the Patent and Trademark Office.

Date: \_\_\_\_\_

*Danna Hengst*  
 Signature

(Petition for Withdrawal of Abandonment--page 1 of 2)

##



Wilson Sonsini Goodrich & Rosati  
PROFESSIONAL CORPORATION

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Firm: U.S. Patent Office	Phone:	<input type="checkbox"/> Notify recipient before sending
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From: Van Mahamed	Phone: (650) 493-8300	Return Fax: (650) 493-6811	Date: February 15, 2000
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Message: PLEASE DELIVER TO Donna Monroe ART UNIT 3738			

Ref: 18461-702      Return Original to: Donna Hengst      Location: FH1-2

APPLICATION No.: 08/824,142  
FILED: March 25, 1997  
TITLE: Intravascular Stent

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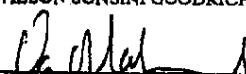
USPTO (578)  
1.1

INISNOS NOSTIM W490:20 00. 91 831

Date: February 16, 2000

650 Page Mill Road  
Palo Alto, CA 94304  
Customer No. 21971

Respectfully submitted,  
WILSON SONSINI GOODRICH & ROSATI

  
Van Mahomed, Reg. No. 42,828

(Petition for Withdrawal of Abandonment--page 2 of 2)



UNITED STATES DEPARTMENT OF COMMERCE  
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130

Paper No. 14

Alan A. Csontos  
INTELLECTUAL PROPERTY DEPARTMENT  
P.O. Box 2026  
Greenville, SC 29602

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ON PETITION

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In re Application of  
Jean-Claude Arnaud, et al.  
Application No. 08/323,211  
Filed: October 14, 1994

This is a decision on the renewed petition under 37 CFR 1.137(b),  
filed July 11, 1997 to revive the above-identified application.

The petition is granted.

This application became abandoned for failure to timely respond  
to the final Office action mailed April 15, 1996, which set a  
three month shortened statutory period for filing a response. No  
extensions of time having been obtained pursuant to the  
provisions of 37 CFR 1.136(a), the date of abandonment of this  
application is July 16, 1996. Therefore, since this petition was  
filed within one year of the date of abandonment, the petition  
complies with the one year filing period requirement in 37 CFR  
1.137(b).

Since this application is being revived for purposes of  
continuity only and since continuity has been established by this  
decision reviving the application, the application is again  
abandoned in favor of the continuing application.

Applicant should file a written notice in the continuing  
application within ONE MONTH from the mail date of this decision  
indicating that the present application has been revived for  
purposes of continuity and, accordingly, that the continuing  
application complies with the copendency requirements of the  
rules. The failure to file such a notice may result in the  
continuing application being inadvertently returned to applicant.

Serial No. 323,211

-2-

The file is being forwarded to Group 1300.

Telephone inquiries concerning this matter may be directed to the undersigned at (703) 305-8859.

*Karen Creasy*  
Karen Creasy  
Legal Instruments Examiner  
Office of Petitions  
Office of the Deputy Assistant Commissioner  
for Patent Policy and Projects



# **EXHIBIT 15**

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PTO/SB/29 (12/97)

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Approved for use through 9/30/00, OMB 0641-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE**CONTINUED PROSECUTION APPLICATION (CPA)  
REQUEST TRANSMITTAL**Submit an original, and a duplicate for fee processing.  
(Only for Continuation or Divisional applications under 37 CFR 1.53(d))CHECK BOX, if applicable:  
☒ **DUPLICATE****Address to:**Assistant Commissioner for Patents  
Box CPA  
Washington, DC 20231**Attorney Docket No.**

18461.702

**First Named Inventor**

C. David Jang

**Express Mail Label No.**

EL322090213US

**Total Pages**

10

This is a request for a ☒ continuation or ☐ divisional application under 37 CFR 1.53(d),  
(continued prosecution application (CPA)) of prior application number 08/824,142,  
filed on March 25, 1997, entitled INTRAVASCULAR STENT**NOTES****FILING QUALIFICATIONS:** The prior application identified above must be a nonprovisional application that is either: (1) complete as defined by 37 CFR 1.51(b) and filed on or after June 8, 1995, or (2) the national stage of an international application in compliance with 35 U.S.C. 371 and filed on or after June 8, 1995.**C-I-P NOT PERMITTED:** A continuation-in-part application cannot be filed as a CPA under 37 CFR 1.53(d), but must be filed under 37 CFR 1.53(b).**EXPRESS ABANDONMENT OF PRIOR APPLICATION:** The filing of this CPA is a request to expressly abandon the prior application as of the filing date of the request for a CPA. 37 CFR 1.53(b) must be used to file a continuation, divisional, or continuation-in-part of an application that is not to be abandoned.**ACCESS TO PRIOR APPLICATION:** The filing of this CPA will be construed to include a waiver of confidentiality by the applicant under 35 U.S.C. 122 to the extent that any member of the public who is entitled under the provisions of 37 CFR 1.14 to access to, copies of, or information concerning, the prior application may be given similar access to, copies of, or similar information concerning, the other application or applications in the file jacket.**35 U.S.C. 120 STATEMENT:** In a CPA, no reference to the prior application is needed in the first sentence of the specification and none should be submitted. If a sentence referencing the prior application is submitted, it will not be entered. A request for a CPA is the specific reference required by 35 U.S.C. 120 and in every application assigned the application number identified in such request, 37 CFR 1.78(e).

1. ☐ Enter the unentered amendment previously filed on \_\_\_\_\_ under 37 CFR 1.116 in the prior nonprovisional application.
2. ☒ A preliminary amendment is enclosed.
3. This application is filed by fewer than all the inventors named in the prior application, 37 CFR 1.53(d)(4).
  - a. ☐ **DELETE** the following inventor(s) named in the prior nonprovisional application:  
\_\_\_\_\_
  - b. ☐ The inventor(s) to be deleted are set forth on a separate sheet attached hereto.
4. ☐ A new power of attorney or authorization of agent (PTO/SB/81) is enclosed.
5. Information Disclosure Statement (IDS) is enclosed.
  - a. ☐ PTO-1449
  - b. ☐ Copies of IDS Citations

(Page 1 of 2)

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box CPA, Washington, DC 20231.

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS (37 CFR 1.16(e))	72 - 20 =	52	× \$18 =	\$ 936.00
	INDEPENDENT CLAIMS (37 CFR 1.16(b))	5 - 3 =	2	× \$78 =	156.00
	MULTIPLE DEPENDENT CLAIMS (if applicable) (37 CFR 1.16(d))			× \$ =	
				BASIC FEE (37 CFR 1.16(a))	760.00
					1,852.00
				Reduction by 50% for filing by small entity (Note 37 CFR 1.9, 1.27, 1.28).	
				TOTAL =	\$1,852.00

## 6. Small entity status:

- a. ☐ A small entity statement is enclosed.
- b. ☐ A small entity statement was filed in the prior nonprovisional applications and such status is still proper and desired.
- c. ☐ Is no longer claimed.

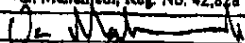
7. The Commissioner is hereby authorized to credit overpayments or charge the following fees to Deposit Account No. 22 - 2415:

- a. ☒ Fees required under 37 CFR 1.16.
- b. ☒ Fees required under 37 CFR 1.17.
- c. ☐ Fees required under 37 CFR 1.18.

8. ☐ A check in the amount of \$\_\_\_\_\_ is enclosed.9. ☒ Other: 2 Month Extension of Time for a fee of \$380.00**NOTE:**

The prior application's correspondence address will carry over to this CPA  
UNLESS a new correspondence address is provided below.

10. NEW CORRESPONDENCE ADDRESS				
<input type="checkbox"/> Customer Number or Bar Code Label		021971		<input type="checkbox"/> New correspondence address below
(Insert Customer No. or Attach bar code label here)				
NAME				
ADDRESS				
CITY		STATE	ZIP CODE	
COUNTRY	TELEPHONE		FAX	

11. SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED	
NAME	Van Mahamed, Reg. No. 42,828
SIGNATURE	
DATE	November 22, 1999

(Page 2 of 2)

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**  
 "Express Mail" Mailing Label No. EL322090213US  
 Date of Deposit November 22, 1999, I hereby certify that  
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 37 CFR 1.10 on the date indicated above and is addressed to: Box CPA  
 Assistant Commissioner for Patents, Washington, D.C. 20231

Donna L. Hengst  
 Donna L. Hengst

Attorney Docket No.: 18461.702

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	)	
	)	
G. David Jang	)	Group Art Unit: 3738
	)	
Application No.: 08/824,142	)	Examiner: Nguyen, D.
	)	
Filed: March 25, 1997	)	
	)	
For: <u>INTRAVASCULAR STENT</u>	)	

**PRELIMINARY AMENDMENT**

Box CPA  
 Assistant Commissioner for Patents  
 Washington, D.C. 20231

Sir:

Applicant submits this amendment concurrently with a Continuation Prosecution Application (CPA), in response to the Office Action mailed June 22, 1999, and the Advisory Action mailed October 13, 1999. Reconsideration is respectfully requested in view of the following amendments and remarks.

**RESTRICTION/ELECTION REQUIREMENT:**

Applicant withdraws claims 4, 6, 8, 9, and 75-83. Applicant requests reinstatement of these claims if claim 1 is allowed.

In the Claims:

Please amend the claims as follows:

1. (Twice Amended) A stent in a non-expanded state, comprising:

a first column expansion strut pair formed of a first expansion strut and a [parallel] second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

[a first serial connecting strut,] a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells.

10. (Twice Amended) The stent of claim 1, wherein a [spacing] first distance between the first expansion strut and the second expansion strut of the first expansion column strut pair [and the spacing] is different than a second distance between a first expansion strut and a second expansion strut of an adjacent first expansion column strut pair in the first expansion column are different.

11. (Twice Amended) The stent of claim [1] 10, wherein a [spacing] first distance between the first expansion strut and the second expansion strut of the second column expansion strut pair [and the spacing] is different than a second distance between a first expansion strut and

a second expansion strut of an adjacent second column expansion strut pair in the second expansion column are different.

12. (Twice Amended) The stent of claim [2] 11, wherein [a spacing distance between] the first and second distance in the first expansion column [strut pair and the spacing distance between an adjacent first expansion column strut pair in the first expansion column, and a spacing distance between the second column expansion strut pair and the spacing distance between an adjacent second column expansion strut pair in the second expansion column] are the same, and wherein the first and second distance in the second expansion column are the same.

21. (Twice Amended) A stent in a non-expanded state, comprising:

a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a first connecting strut column formed of a plurality of first connecting struts, a first connecting strut in the first connecting strut column including multiple linear sections, wherein the first connecting strut column couples the first expansion column to the second expansion column and [at least a portion of the first connecting struts include a proximal section, a distal section, a first linear section and] includes a first slant angle formed between two of the multiple linear sections.

40. (Amended) The stent of claim 21, further comprising:

a third expansion strut column formed of a plurality of the third expansion struts; and

a second connecting strut column formed of a plurality of second connecting struts, a first connecting strut in the third connecting strut column including a linear section, wherein the

second connecting strut column couples the second expansion column to the third expansion column and [at least a portion of the second connecting struts include a proximal section, a distal section, a first linear section and] includes a third slant angle formed between two of the multiple linear sections.

49. (Twice Amended) A stent in a non-expanded state, comprising:

a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a first connecting strut column formed of a plurality of first connecting struts, the first connecting struts including multiple linear sections, wherein the first connecting strut column couples the first expansion column to the second expansion column and a first expansion strut in the first expansion column is circumferentially offset from a corresponding second expansion strut of the second expansion column.

64. (Amended) The stent of claim 63, wherein at least a portion of the second connecting struts include a proximal section coupled to a distal section of a second expansion strut, a distal section coupled to a proximal section of a corresponding third expansion strut, a first linear section between the proximal and distal sections and a [third] strut angle.

67. (Amended) The stent of claim 63, wherein the portion of the second connecting struts including a [third] slant angle have a second linear section coupled to the first linear section and the third slant angle is formed between the first and second linear sections.

68. (Amended) The stent of claim 64, wherein the portion of the second connecting struts including the [third] slant angle have a second linear section coupled to the first linear section of

the second connecting strut and the [third] slant angle is formed between the first and second linear sections.

69. (Amended) The stent of claim 68, wherein each [third strut] slant angle of the second connecting struts is directed in a second circumferential direction that is in an opposite direction of a first circumferential direction of [the first strut] a slant angle of the first connecting [strut] struts.

Please add the following new claims.

84. (New) A stent in a non-expanded state, comprising:

a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column being either vertical or including at least a first section having a slope in with a first vertical component, and a second section having a slope with a second vertical component; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells.



85. (New) A stent in a non-expanded state, comprising:

a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a first connecting strut column formed of a plurality of first connecting struts, a first connecting strut in the first connecting strut column including at least a first section that is either vertical or has a slope with a first vertical component, and a second section that has a slope with a second vertical component, wherein the first connecting strut column couples the first expansion column to the second expansion column and a first expansion strut in the first expansion column is circumferentially offset from a corresponding second expansion strut of the second expansion column.

#### **REMARKS**

Applicant thanks the Examiner for thoroughly reviewing the application. Amendments and remarks enclosed herein are intended to place all claims in the application in condition for allowance. Therefore, Applicant requests the Examiner's discretion in considering this response.

#### **1. Election/Restriction Requirement**

In the Office Action, the Examiner requested that the Applicant withdraw claims 4, 6, 8, 9. Applicant has withdrawn these claims, but requests reinstatement of the claims if the Examiner indicates claim 1 is in condition for allowance. Claim 1 is a genus that reads on a structure such as shown by FIG. 8C, and claims 4, 6, 8, 9 are species under claim 1.

While Applicant disagrees with the Examiner's assertions regarding claims 75-83, Applicant has cancelled these claims without prejudice to expedite prosecution of this application.

2. Rejection Under 35 U.S.C. § 112, Second Paragraph

In the Office Action the Examiner rejected claims 10-12, 64, 67-69 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended these claims to specifically deal with the language that the Examiner found objectionable. Applicant respectfully requests reconsideration of these claims in light of these amendments.

3. Rejection Under 35 U.S.C. § 102(e)

In the Office Action, the Examiner rejected claims 1-3, 7, 12, 17, 22-22 and 35 under 35 U.S.C. § 102(e) as being anticipated by Pinchasik, et al. (U.S. Pat. No. 5,449,373). While Applicant disagrees with the applicability of Pinchasik, Applicant has amended each of the independent claims 1, 21, and 49 to recite at least one connecting strut in the connecting strut column to include multiple linear sections. Applicant submits that Pinchasik does not disclose linear connecting struts.

Further, Applicant requests reconsideration of claims 1, 21, and 49 because Pinchasik does not disclose a substantially linear joining strut connecting the expansion struts. In the Office Action, the Examiner stated that FIG. 3 of Pinchasik has "has *parts* to the joining struts 124 that are 'substantially linear' and non-perpendicular to the parallel struts." This characterization is not equivalent to "substantially linear joining strut", as recited in the independent claims. Applicant notes that the Examiner's characterization is applicable to curved struts and straight struts alike.

Therefore, Applicant submits that claims 1-3, 7, 12, 17, 21, 22, and 35 are patentably distinct from Pinchasik.

The features mentioned above regarding the connecting struts and the joining struts of amended claims 1, 21, and 49 are repeated with respect to Orth. Therefore, Applicant submits that claims 1-3, 5, 10-13, 21, 22, 49, 60, and 63 are patentably distinct from Orth.

4. Rejection Under 35 U.S.C. § 103(a)

Claims 19, 20, 65, 66 and 72 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pinchasik, Orth or Israel, as applied above in view of Fischell et al., (U.S. 5,607,442). However, in light of the amendments made to claims 1, 21 and 49, Applicant submits that this rejection is now moot.

CONCLUSION

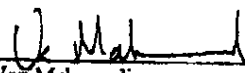
It is submitted that the present application is in form for allowance, and such action is respectfully requested. If any outstanding issues remain, Applicant urges the Patent Office to telephone Applicants attorneys so that these issues may be resolved in an expeditious manner.

The Commissioner is hereby authorized to charge any fees that may be required by this paper, and to credit any overpayment, to Deposit Account No. 23-2415 (Docket No. 18461.702).

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI

By

  
Van Mahamedi  
Registration No. 42,828

650 Page Mill Road  
Palo Alto, CA 94304-1050  
Telephone: (650) 320-4591  
Date: November 22, 1999

# **EXHIBIT 16**

**MAILED**

**MAR 15 2000**

**Director's Office  
Group 3700**



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231**

In re Application of: :  
David G. Jang :  
Serial No.: 08/824,142 :  
Filed: March 25, 1997 :  
For: INTRAVASCULAR STENT :

*#16*  
DECISION ON  
PETITION

This is a decision on applicants' request filed February 16, 2000, to review the holding of abandonment, mailed February 7, 2000, for failure to respond to the Office Action of June 22, 1999.

A review of the file indicates that a response was timely filed on November 22, 1999.

The response was in the form of a request for the filing of a continuing prosecution application (CPA) which includes an express abandonment of the prior application which is hereby acknowledged. The prior application, therefor, remains abandoned as of November 22, 1999. The request for a CPA will be processed in due course.

Summary: Holding of Abandonment Withdrawn and Express Abandonment  
Acknowledged.

*John J. Love*  
John J. Love, Director, Groups 3730/3760  
Mechanical Engineering, Manufacturing  
and Products (703) 308-0873

JJL:nlw

Wilson Sonsini Goodrich Rosati  
650 Page Mill Road  
Palo Alto, CA 94304-1050

# **EXHIBIT 17**



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/824,142 03/25/97 JANG

D 17826-707

EXAMINER

GM12/0515

WILSON SONSINI GOODRICH ROSATI  
 650 PAGE MILL ROAD  
 PALO ALTO CA 94304-1050

NGUYEN, D

ART UNIT

PAPER NUMBER

3738

DATE MAILED:

05/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>08/824,142</b>	Applicant(s) <b>Jang</b>
	Examiner <b>Dinh Nguyen</b>	Group Art Unit <b>3738</b>

☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

☒ Claim(s) 1-13, 17, 19-22, 49, 60, 63-69, 72, and 75-85 is/are pending in the application.

Of the above, claim(s) 4, 6, 8, and 75-83 is/are withdrawn from consideration.

☒ Claim(s) 49, 60, 63-69, and 72 is/are allowed.

☒ Claim(s) 1-3, 7, 12, 17, 19-22, 84, and 85 is/are rejected.

☒ Claim(s) 5, 9-11, and 13 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —



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Page 2

Art Unit: 3738

#### DETAILED ACTION

##### *Claim Rejections - 35 USC § 112*

Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 10 and 11, Applicant's amendment has stated that the distance between the first set of expansion struts is different from the second set, but at the end of the claim, the words "are different" at the last line of the claim still exist in the claim making it redundant and confusing. It would appear that these words were supposed to be deleted when additional language were added to the claim language.

In claim 12, a similar problem exists similar to above for claims 10 and 11. It appears that line 6, "are the same" should be deleted.

##### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 of this title before the invention thereof by the applicant for patent.

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Art Unit: 3738

Claims 1-3, 7, 12, 17, 21, 22, 84 and 85 are rejected under 35 U.S.C. 102(e) as being anticipated by Pinchasik et al., USPN 5,449,373 as submitted in Applicant's IDS and applied in the previous office action. The rejection is reiterated herein for convenience:

"Pinchasik discloses a stent having all of the claimed features. See figures 2A, 2B and 2C. The stent as disclosed have different columns of expansion struts and connecting struts as claimed. In these figures, the cells immediately underneath the expansion struts 112 are asymmetrical in shape as claimed for claim 1. As to claim 21, the claim merely requires two sets of column struts and a column of expansion struts having a linear section and an angle. Figures 2A-2C clearly show a stent meeting all of these broadly claimed features. The independent claims as cited above merely require the struts to have generic geometry which are clearly found in the stent of Pinchasik."

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinchasik as applied above in view of Fischell et al., USPN 5,607,442. With respect to these claims, the primary references as applied do not disclose the use of radiopaque material and

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electroplating. However, Fischell teaches using radiopaque material for fluoroscopic examination and electroplating for stent material. See abstract and column 3, lines 39-49. It would have been obvious to one of ordinary skill in the art to have combined the teaching of using radiopaque material and electroplating, as taught by Fischell, to the stents of Pinchasik, in order to provide fluoroscopic examination.

*Response to Applicant's Arguments*

Applicant has argued that Applicant's claim language regarding "substantially linear joining struts" is not met by the prior art as applied. Examiner disagrees with this line of argument. The figure as cited clearly show the struts to be slightly curved, they are considered to meet the broad language of "substantially linear."

*Allowable Subject Matter*

 Claims 49, 60, 63-69 and 72 are allowed.

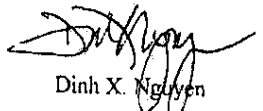
Claims 5, 9-11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh X. Nguyen whose telephone number is (703) 305-3522.

A handwritten signature in black ink, appearing to read 'Dinh X. Nguyen', is positioned above the printed name.

Dinh X. Nguyen

May 12, 2000

# **EXHIBIT 18**

Please type a plus sign (+) inside the box →



GAU373 55300

PTO/SB/29 (12/97)

Approved for use through 9/30/00. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

	<b>CONTINUED PROSECUTION APPLICATION (CPA)</b>		2012
	<b>REQUEST TRANSMITTAL</b>		
Submit an original, and a duplicate for fee processing. (Only for Continuation or Divisional applications under 37 CFR 1.53(d))			CHECK BOX, if applicable: <input checked="" type="checkbox"/> <b>DUPLICATE</b>

Address to:  <b>Assistant Commissioner for Patents</b> <b>Box CPA</b> <b>Washington, DC 20231</b>	Attorney Docket No.	18461.702	Reg CPA
	First Named Inventor	C. David Jang	
	Express Mail Label No.	EL322090213US	
	Total Pages	10	

This is a request for a ☒ continuation or ☐ divisional application under 37 CFR 1.53(d),  
 (continued prosecution application (CPA)) of prior application number 08/824,142,  
 filed on March 25, 1997, entitled INTRAVASCULAR STENT

**NOTES**

**FILING QUALIFICATIONS:** The prior application identified above must be a nonprovisional application that is either: (1) complete as defined by 37 CFR 1.51(b) and filed on or after June 8, 1995, or (2) the national stage of an international application in compliance with 35 U.S.C. 371 and filed on or after June 8, 1995.

**C-I-P NOT PERMITTED:** A continuation-in-part application cannot be filed as a CPA under 37 CFR 1.53(d), but must be filed under 37 CFR 1.53(b).

**EXPRESS ABANDONMENT OF PRIOR APPLICATION:** The filing of this CPA is a request to expressly abandon the prior application as of the filing date of the request for a CPA. 37 CFR 1.53(h) must be used to file a continuation, divisional, or continuation-in-part of an application that is not to be abandoned.

**ACCESS TO PRIOR APPLICATION:** The filing of this CPA will be construed to include a waiver of confidentiality by the applicant under 35 U.S.C. 122 to the extent that any member of the public who is entitled under the provisions of 37 CFR 1.14 to access to, copies of, or information concerning, the prior application may be given similar access to, copies of, or similar information concerning, the other application or applications in the file jacket.

**35 U.S.C. 120 STATEMENT:** In a CPA, no reference to the prior application is needed in the first sentence of the specification and none should be submitted. If a sentence referencing the prior application is submitted, it will not be entered. A request for a CPA is the specific reference required by 35 U.S.C. 120 and to every application assigned the application number identified in such request, 37 CFR 1.78(a).

1. ☐ Enter the unentered amendment previously filed on \_\_\_\_\_ under 37 CFR 1.116 in the prior nonprovisional application.
2. ☒ A preliminary amendment is enclosed.
3. This application is filed by fewer than all the inventors named in the prior application, 37 CFR 1.53(d)(4).
  - a. ☐ **DELETE** the following inventor(s) named in the prior nonprovisional application:  
 \_\_\_\_\_
  - b. ☐ The inventor(s) to be deleted are set forth on a separate sheet attached hereto.
4. ☐ A new power of attorney or authorization of agent (PTO/SB/81) is enclosed.
5. Information Disclosure Statement (IDS) is enclosed. 11/26/1999 INVDWG 00000042 232415 08824142
  - a. ☐ PTO-1449
 

01 FC:131	760.00 CH
02 FC:102	156.00 CH
03 FC:103	936.00 CH
04 FC:116	380.00 CH
  - b. ☐ Copies of IDS Citations

(Page 1 of 2)

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box CPA, Washington, DC 20231.

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS (37 CFR 1.16(c))	72 -20 =	52	X \$18 =	\$ 936.00
	INDEPENDENT CLAIMS (37 CFR 1.16(b))	5-3 =	2	X \$78 =	156.00
	MULTIPLE DEPENDENT CLAIMS (if applicable) (37 CFR 1.16(d))			X \$ =	
				BASIC FEE (37 CFR 1.16(a))	760.00
					1,852.00
				Reduction by 50% for filing by small entity (Note 37 CFR 1.9, 1.27, 1.28).	
				TOTAL =	\$1,852.00

6. Small entity status:

a. ☐ A small entity statement is enclosed.

b. ☐ A small entity statement was filed in the prior nonprovisional applications and such status is still proper and desired.

c. ☐ Is no longer claimed.

7. The Commissioner is hereby authorized to credit overpayments or charge the following fees to Deposit Account No. 23 - 2415:

a. ☒ Fees required under 37 CFR 1.16.

b. ☒ Fees required under 37 CFR 1.17.

c. ☐ Fees required under 37 CFR 1.18.

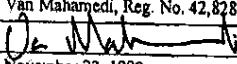
8. ☐ A check in the amount of \$\_\_\_\_\_ is enclosed.

9. ☒ Other: 2 Month Extension of Time for a fee of \$380.00

RECEIVED  
NOV 29 1999  
TC 3760 MAIL ROOM

**NOTE:** The prior application's correspondence address will carry over to this CPA UNLESS a new correspondence address is provided below.

10. NEW CORRESPONDENCE ADDRESS					
<input type="checkbox"/> Customer Number or Bar Code Label		021971		or <input type="checkbox"/> New correspondence address below	
(Insert Customer No. or Attach bar code label here)					
NAME					
ADDRESS					
CITY	STATE	ZIP CODE			
COUNTRY	TELEPHONE	FAX			

11. SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED	
NAME	Van Mahamed, Reg. No. 42,828
SIGNATURE	
DATE	November 22, 1999

[Page 2 of 2]

# **EXHIBIT 19**





*EC*  
*5-2300*  
*19/E*

**CERTIFICATE OF MAILING BY "EXPRESS MAIL,"**  
 "Express Mail" Mailing Label No. EL322090213US  
 Date of Deposit November 22, 1999, I hereby certify that  
 this paper or fee is being deposited with the United States Postal  
 Services "Express Mail Post Office to Addressee" service under  
 37 CFR 1.10 on the date indicated above and is addressed to: Box CPA  
 Assistant Commissioner for Patents, Washington, D.C. 20231

*Donna L. Hengst*  
 Donna L. Hengst

Attorney Docket No.: 18461.702

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of

G. David Jang

Application No.: 08/824,142

Filed: March 25, 1997

For: INTRAVASCULAR STENT

Group Art Unit: 3738

Examiner: Nguyen, D.

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**PRELIMINARY AMENDMENT**

Box CPA  
 Assistant Commissioner for Patents  
 Washington, D.C. 20231

Sir:

Applicant submits this amendment concurrently with a Continuation Prosecution Application (CPA), in response to the Office Action mailed **June 22, 1999**, and the Advisory Action mailed **October 13, 1999**. Reconsideration is respectfully requested in view of the following amendments and remarks.

**RESTRICTION/ELECTION REQUIREMENT:**

Applicant withdraws claims 4, 6, 8, 9, and 75-83. Applicant requests reinstatement of these claims if claim 1 is allowed.

**In the Claims:**

Please amend the claims as follows:

Sub 71  
Gst

1. (Twice Amended) A stent in a non-expanded state, comprising:  
a first column expansion strut pair formed of a first expansion strut and a [parallel] second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;  
a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and  
[a first serial connecting strut,] a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections; and  
wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells.

Sub 74  
Gst

10. (Twice Amended) The stent of claim 1, wherein a [spacing] first distance between the first expansion strut and the second expansion strut of the first expansion column strut pair [and the spacing] is different than a second distance between a first expansion strut and a second expansion strut of an adjacent first expansion column strut pair in the first expansion column are different.

11. (Twice Amended) The stent of claim [1] 10, wherein a [spacing] first distance between the first expansion strut and the second expansion strut of the second column expansion strut pair [and the spacing] is different than a second distance between a first expansion strut and

*for  
consider*

~~a second expansion strut of an adjacent second column expansion strut pair in the second expansion column are different.~~

~~12. (Twice Amended) The stent of claim [2] 11, wherein [a spacing distance between the first and second distance in the first expansion column [strut pair and the spacing distance between an adjacent first expansion column strut pair in the first expansion column, and a spacing distance between the second column expansion strut pair and the spacing distance between an adjacent second column expansion strut pair in the second expansion column] are the same, and wherein the first and second distance in the second expansion column are the same.~~

*Sub 76*

~~21. (Twice Amended) A stent in a non-expanded state, comprising:  
a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;~~

*W*

~~a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;~~

~~a first connecting strut column formed of a plurality of first connecting struts, a first connecting strut in the first connecting strut column including multiple linear sections, wherein the first connecting strut column couples the first expansion column to the second expansion column and [at least a portion of the first connecting struts include a proximal section, a distal section, a first linear section and] includes a first slant angle formed between two of the multiple linear sections.~~

*64*

~~40. (Amended) The stent of claim 21, further comprising:~~

~~a third expansion strut column formed of a plurality of the third expansion struts; and~~

~~a second connecting strut column formed of a plurality of second connecting struts, a first connecting strut in the third connecting strut column including a linear section, wherein the~~

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continued

second connecting strut column couples the second expansion column to the third expansion column and [at least a portion of the second connecting struts include a proximal section, a distal section, a first linear section and] includes a third slant angle formed between two of the multiple linear sections.

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49. (Twice Amended) A stent in a non-expanded state, comprising:

a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

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a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a first connecting strut column formed of a plurality of first connecting struts, the first connecting struts including multiple linear sections, wherein the first connecting strut column couples the first expansion column to the second expansion column and a first expansion strut in the first expansion column is circumferentially offset from a corresponding second expansion strut of the second expansion column.

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64. (Amended) The stent of claim 63, wherein at least a portion of the second connecting struts include a proximal section coupled to a distal section of a second expansion strut, a distal section coupled to a proximal section of a corresponding third expansion strut, a first linear section between the proximal and distal sections and a [third] strut angle.

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65. (Amended) The stent of claim 63, wherein the portion of the second connecting struts including a [third] slant angle have a second linear section coupled to the first linear section and the third slant angle is formed between the first and second linear sections.

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66. (Amended) The stent of claim 64, wherein the portion of the second connecting struts including the [third] slant angle have a second linear section coupled to the first linear section of

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the second connecting strut and the [third] slant angle is formed between the first and second linear sections.

88 139. (Amended) The stent of claim 68, wherein each [third strut] slant angle of the second connecting struts is directed in a second circumferential direction that is in an opposite direction of a first circumferential direction of [the first strut] a slant angle of the first connecting [strut] struts.

Please add the following new claims.

88 84. (New) A stent in a non-expanded state, comprising:

a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column being either vertical or including at least a first section having a slope in with a first vertical component, and a second section having a slope with a second vertical component; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells.

26/ 85. (New) A stent in a non-expanded state, comprising:

a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a first connecting strut column formed of a plurality of first connecting struts, a first connecting strut in the first connecting strut column including at least a first section that is either vertical or has a slope with a first vertical component, and a second section that has a slope with a second vertical component, wherein the first connecting strut column couples the first expansion column to the second expansion column and a first expansion strut in the first expansion column is circumferentially offset from a corresponding second expansion strut of the second expansion column.

#### REMARKS

Applicant thanks the Examiner for thoroughly reviewing the application. Amendments and remarks enclosed herein are intended to place all claims in the application in condition for allowance. Therefore, Applicant requests the Examiner's discretion in considering this response.

#### 1. Election/Restriction Requirement

In the Office Action, the Examiner requested that the Applicant withdraw claims 4, 6, 8, 9. Applicant has withdrawn these claims, but requests reinstatement of the claims if the Examiner indicates claim 1 is in condition for allowance. Claim 1 is a genus that reads on a structure such as shown by FIG. 8C, and claims 4, 6, 8, 9 are species under claim 1.

While Applicant disagrees with the Examiner's assertions regarding claims 75-83, Applicant has cancelled these claims without prejudice to expedite prosecution of this application.

**2. Rejection Under 35 U.S.C. §112, Second Paragraph**

In the Office Action the Examiner rejected claims 10-12, 64, 67-69 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended these claims to specifically deal with the language that the Examiner found objectionable. Applicant respectfully requests reconsideration of these claims in light of these amendments.

**3. Rejection Under 35 U.S.C. § 102(e)**

In the Office Action, the Examiner rejected claims 1-3, 7, 12, 17, 22-22 and 35 under 35 U.S.C. § 102(e) as being anticipated by Pinchasik, et al. (U.S. Pat. No. 5,449,373). While Applicant disagrees with the applicability of Pinchasik, Applicant has amended each of the independent claims 1, 21, and 49 to recite at least one connecting strut in the connecting strut column to include multiple linear sections. Applicant submits that Pinchasik does not disclose linear connecting struts.

Further, Applicant requests reconsideration of claims 1, 21, and 49 because Pinchasik does not disclose a substantially linear joining strut connecting the expansion struts. In the Office Action, the Examiner stated that FIG. 3 of Pinchasik has "has *parts* to the joining struts 124 that are 'substantially linear' and non-perpendicular to the parallel struts." This characterization is not equivalent to "substantially linear joining strut", as recited in the independent claims. Applicant notes that the Examiner's characterization is applicable to curved struts and straight struts alike.

Therefore, Applicant submits that claims 1-3, 7, 12, 17, 21, 22, and 35 are patentably distinct from Pinchasik.

The features mentioned above regarding the connecting struts and the joining struts of amended claims 1, 21, and 49 are repeated with respect to Orth. Therefore, Applicant submits that claims 1-3, 5, 10-13, 21, 22, 49, 60, and 63 are patentably distinct from Orth.

**4. Rejection Under 35 U.S.C. § 103(a)**

Claims 19, 20, 65, 66 and 72 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pinchasik, Orth or Israel, as applied above in view of Fischell et al., (U.S. 5,607,442). However, in light of the amendments made to claims 1, 21 and 49, Applicant submits that this rejection is now moot.

CONCLUSION

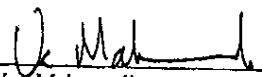
It is submitted that the present application is in form for allowance, and such action is respectfully requested. If any outstanding issues remain, Applicant urges the Patent Office to telephone Applicants attorneys so that these issues may be resolved in an expeditious manner.

The Commissioner is hereby authorized to charge any fees that may be required by this paper, and to credit any overpayment, to Deposit Account No. 23-2415 (Docket No. 18461.702).

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI

By

  
Van Mahamedi  
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Palo Alto, CA 94304-1050  
Telephone: (650) 320-4591  
Date: November 22, 1999



# **EXHIBIT 20**



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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Application No. 02/000,000 Filed 01/01/00

WILLIAM TOMMIE L. CORREIA, JR.  
AND PAMELA L. CORREIA  
PUBLISHED FOR EXAMINATION

EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED:

06, 05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>08/824,142</b>	Applicant(s) <b>Jang</b>
	Examiner <b>Dinh Nguyen</b>	Group Art Unit <b>3738</b>

☒ Responsive to communication(s) filed on May 23, 1900

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

☒ Claim(s) 1-13, 17, 19-22, 49, 60, 63-69, 72, and 75-85 is/are pending in the application.

Of the above, claim(s) 4, 6, 8, and 75-83 is/are withdrawn from consideration.

☒ Claim(s) 49, 60, 63-69, and 72 is/are allowed.

☒ Claim(s) 1-3, 7, 12, 17, 19-22, 84, and 85 is/are rejected.

☒ Claim(s) 5, 9-11, and 13 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Application/Control Number: 08/824,142

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Art Unit: 3738

#### **DETAILED ACTION**

Applicant has filed a request for CPA and an amendment dated 5-23-00. However, the amendment is a repeat of the amendment filed 11-22-99. Therefore, the office action dated 5-15-00 is repeated and reiterated below.

#### ***Claim Rejections - 35 USC § 112***

Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 10 and 11, Applicant's amendment has stated that the distance between the first set of expansion struts is different from the second set, but at the end of the claim, the words "are different" at the last line of the claim still exist in the claim making it redundant and confusing. It would appear that these words were supposed to be deleted when additional language were added to the claim language.

In claim 12, a similar problem exists similar to above for claims 10 and 11. It appears that line 6, "are the same" should be deleted.

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*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 of this title before the invention thereof by the applicant for patent.

Claims 1-3, 7, 12, 17, 21, 22, 84 and 85 are rejected under 35 U.S.C. 102(e) as being anticipated by Pinchasik et al., USPN 5,449,373 as submitted in Applicant's IDS and applied in the previous office action. The rejection is reiterated herein for convenience:

"Pinchasik discloses a stent having all of the claimed features. See figures 2A, 2B and 2C. The stent as disclosed have different columns of expansion struts and connecting struts as claimed. In these figures, the cells immediately underneath the expansion struts 112 are asymmetrical in shape as claimed for claim 1. As to claim 21, the claim merely requires two sets of column struts and a column of expansion struts having a linear section and an angle. Figures 2A-2C clearly show a stent meeting all of these broadly claimed features. The independent claims as cited above merely require the struts to have generic geometry which are clearly found in the stent of Pinchasik."

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*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinchasik as applied above in view of Fischell et al., USPN 5,607,442. With respect to these claims, the primary references as applied do not disclose the use of radiopaque material and electroplating. However, Fischell teaches using radiopaque material for fluoroscopic examination and electroplating for stent material. See abstract and column 3, lines 39-49. It would have been obvious to one of ordinary skill in the art to have combined the teaching of using radiopaque material and electroplating, as taught by Fischell, to the stents of Pinchasik, in order to provide fluoroscopic examination.

*Response to Applicant's Arguments*

Applicant has argued that Applicant's claim language regarding "substantially linear joining struts" is not met by the prior art as applied. Examiner disagrees with this line of argument. The figure as cited clearly show the struts to be slightly curved, they are considered to meet the broad language of "substantially linear."

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*Allowable Subject Matter*

Claims 49, , 60, 63-69 and 72 are allowed.

Claims 5, 9-11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

This is a CPA of applicant's earlier Application No. 08/824,142. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

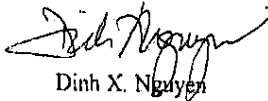
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh X. Nguyen whose telephone number is (703) 305-3522.

A handwritten signature in black ink, appearing to read "Dinh X. Nguyen", is positioned above the printed name.

Dinh X. Nguyen

June 3, 2000





# **EXHIBIT 21**





**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/824,142	03/26/97	JANG	D 17826-767

GM12/0718  
 WILSON SONSINI GOODRICH ROSATI  
 650 PAGE MILL ROAD  
 PALO ALTO CA 94304-1050

EXAMINER

NGUYEN, D

ART UNIT

PAPER NUMBER

3736

DATE MAILED:

21  
 07/18/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Interview Summary</b>	Application No. <b>08/824,142</b>	Applicant(s) <b>Jang</b>
	Examiner <b>Dinh Nguyen</b>	Group Art Unit <b>3738</b>

All participants (applicant, applicant's representative, PTO personnel):

(1) Dinh Nguyen (3) \_\_\_\_\_

(2) Van Mahamed (4) \_\_\_\_\_

Date of Interview Jun 30, 2000

Type: ☒ Telephonic ☐ Personal (copy is given to ☐ applicant ☐ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description:

\_\_\_\_\_

Agreement ☒ was reached. ☐ was not reached.

Claim(s) discussed: all pending claims

Identification of prior art discussed:  
none

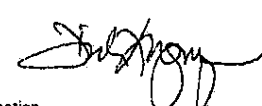
Description of the general nature of what was agreed to if an agreement was reached, or any other comments:  
It is agreed, as per Mr. Mahamed's phone call to Examiner on June 30, 2000 that the final rejection dated 6-5-00 is improper. The request for CPA and amendment, paper no. 18 and 19, are duplicates of earlier papers already entered. It appears that Applicant had sent in copies of these since the papers were lost by PTO, and of which these original papers have now been matched with the application. Thus, the final rejection dated 6-5-00 is hereby withdrawn and the non-final rejection dated 5-15-00 stands.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.



Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

# **EXHIBIT 22**



Practitioner's Docket No. 18461-702

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Jang )  
 Serial No.: 08/824,142 ) Group No.: 3738  
 Filed: March 25, 1997 ) Examiner: Nguyen, D.  
 For: INTRAVASCULAR STENT )  
 10/23/2000 ETULU1 00000020 232415 08824142 )  
 01 FC:216 195.00 CH )

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 TECHNOLOGICAL CENTER 3100

Commissioner for Patents  
 Washington, D.C. 20231

**AMENDMENT**

Responsive to the Office Action mailed May 15, 2000, please consider the following amendments and remarks.

In the Claims:

Please cancel claim 12.

Please amend the claims as follows:

1. (Three times Amended) A stent in a non-expanded state, comprising:  
 a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;  
 a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

71 a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections with at least one of the linear sections being substantially parallel to at least one of the first expansion strut or the second expansion strut of the first expansion strut column; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells.

72 45. (Amended) [The stent of claim 2] A stent in a non-expanded state, comprising:  
a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells, and

wherein the first column expansion strut pair defines a first column loop slot, and the second column expansion strut pair defines a second column loop slot, the first column loop slot [is] being non-collinear to the second column loop slot.

73 62. (Amended) [The stent of claim 2] A stent in a non-expanded state, comprising:  
a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-



perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

73 a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells, and

wherein the first column expansion strut pair defines a first column loop slot, and the second column expansion strut pair defines a second column loop slot, the first column loop slot shape [is] being different than a second column loop slot shape.

74 10. (Three times Amended) [ The stent of claim 1] A stent in a non-expanded state, comprising:

a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections; and

74 wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells, and

wherein a first distance between the first expansion strut and the second expansion strut of the first expansion column strut pair is different than a second distance between a first expansion strut and a second expansion strut of an adjacent first expansion column strut pair in the first expansion column [are different].

8 11. (Three times Amended) [ The stent of claim 1 ] A stent in a non-expanded state, comprising:

a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells, and

wherein a first distance between the first expansion strut and the second expansion strut of the second column expansion strut pair is different than a second distance between a first expansion strut and a second expansion strut of an adjacent second column expansion strut pair in the second expansion column [are different].

75 9 13. (Amended) A stent in a non-expanded state, comprising:

a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a

substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

75 a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column including multiple linear sections; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells;

wherein the first column expansion strut pair defines a first column loop slot, and the second column expansion strut pair defines a second column loop slot, and

wherein a spacing distance between the first expansion column strut pair and an adjacent expansion column strut pair in the first expansion column, and a spacing distance between the second column expansion strut pair and an adjacent second column expansion strut pair in the second expansion column are different.

76 13/21. (Three-times Amended) A stent in a non-expanded state, comprising:  
a first expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a second expansion column formed of a plurality of pairs of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle;

a first connecting strut column formed of a plurality of first connecting struts, a first connecting strut in the first connecting strut column including [multiple] a plurality of linear sections, including a linear section in the plurality of linear sections being substantially parallel to at least one of the pairs of the first expansion strut and the second expansion strut in the first expansion

76 column, wherein the first connecting strut column couples the first expansion column to the second expansion column and includes a first slant angle formed between two of the multiple linear sections.

25 84. (Amended) A stent in a non-expanded state, comprising:

77 a first column expansion strut pair formed of a first expansion strut and a second expansion strut that is parallel to the first expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the first column expansion strut pair forming a first expansion column;

a second column expansion strut pair formed of a first expansion strut and a parallel second expansion strut, the first and second expansion struts being coupled by a substantially linear joining strut that is joined to each of the first and second expansion struts at a non-perpendicular angle, a plurality of the second column expansion strut pair forming a second expansion column; and

a plurality of first serial connecting struts forming a first connecting strut column, the plurality of first serial connecting struts coupling the first expansion column to the second expansion column, a first connecting strut in the first connecting strut column [being either] including multiple linear sections, the multiple linear sections including a first section that is vertical or [including] includes at least a first section having a first slope [in with a first vertical component, and] a second section having a second slope [with a second vertical component], and a third section that is substantially parallel to at least one of the first expansion strut or the second expansion strut of the first expansion strut column; and

wherein the first expansion column, the second expansion column, and the first connecting strut column forming a plurality of geometric cells and at least a portion of the plurality are asymmetrical geometric cells.

**REMARKS**

**Summary of the Office Action**

1. Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claims 1-3, 7, 12, 17, 21, 22, 84 and 85 are rejected under 35 U.S.C. 102(e) as being anticipated by Pinchasik et al., USPN 5,449,373 as submitted in Applicant's IDS and applied in the previous office action.
3. Claims 19 and 20 are rejected under 35 U.S.C 103(a) as being unpatentable over Pinchasik in view of Fischell et al., USPN 5,607,442.
4. Claims 49, 60, 63-69 and 72 are allowed.
5. Claims 5, 9-11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Summary of the Response**

Applicant thanks the Examiner for indicating allowable subject matter. In response, Applicant has converted the dependent claims indicated as being allowable in the last Office Action to independent claims.

Applicant has amended independent claims 1, 21, and 84. Applicant is traversing the rejection to independent claim 85. A Notice of Allowance is Requested.

**Rejections under 35 U.S.C. §112**

The Examiner rejects claims 10-12 under §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 10 and 11 have been amended to overcome the rejection. Claim 12 has been cancelled.

**Rejections Under 35 U.S.C. §102**

The Examiner rejects claims 1-3, 7, 12, 17, 21, 22, 84 and 85 under §102(e) as being anticipated by Pinchasik et al., USPN 5,449,373 as submitted in Applicant's IDS and applied in the previous office action. Applicant traverses this rejection. In particular, Applicant disagrees with the Examiner's statement that Pinchasik includes connecting struts with multiple linear sections.

In response, Applicant has amended claims 1, 21 and 84 to further recite a feature of a section of the connecting strut that is substantially parallel to one of the expansion struts. Pinchasik discloses U-shaped connecting struts that are not parallel to the expansion struts.

With respect to claim 85, the claim recites a first expansion strut in the first expansion column is circumferentially offset from a corresponding second expansion strut of the second expansion column. Pinchasik does not disclose or suggest this feature (see e.g. FIG. 3).

Applicant respectfully requests allowance of the claims for all of the reasons stated above.

**Rejections under 35 U.S.C. §103**

The Examiner rejects claims 19 and 20 under §103(a) as being unpatentable over Pinchasik in view of Fischell et al., USPN 5,607,442. The Examiner points out that with respect to these claims, the primary references as applied do not disclose the use of radiopaque material and electroplating for stent material. However, Fischell teaches using radiopaque material for fluoroscopic examination and electroplating for stent material. Finally, the Examiner contends that it would have been obvious to one of ordinary skill in the art to have combined the teaching of using radiopaque material and electroplating, as taught by Fischell, to the stents of Pinchasik, in order to provide fluoroscopic examination. Applicant respectfully disagrees with the applicability of Fischell. Furthermore, there is no suggestion to combine the cited references in the manner suggested by the Examiner.

Applicant believes that this rejection is now moot, since claims 19 and 20 both depend from amended claim 1. Therefore, allowance of claims 19 and 20 is respectfully requested.

CONCLUSION

It is submitted that the present application is in form for allowance, and such action is respectfully requested.

The Commissioner is authorized to charge any additional fees which may be required, including petition fees and extension of time fees, to Deposit Account No. 23-2415 (Docket No. 18461-702).

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI

Date: 10/16/00

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FORM**

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Application Number		08/824,142
Filing Date		03/25/1997
First Named Inventor		Jang
Group/Art Unit		3738
Examiner Name		Nguyen, D.
Total Number of Pages in This Submission	8	Attorney Docket Number
		18461-702

**ENCLOSURES (check all that apply)**

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Response (Supplemental) <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Additional Enclosure(s) (please identify below):
Remarks <div style="border: 1px solid black; height: 40px; width: 100%;"></div>		

**SIGNATURE OF APPLICANT, ATTORNEY OR AGENT**

Firm or Individual name	Van Mahamedi, Reg. No. 42,828, WILSON SONSINI GOODRICH & ROSATT
Signature	
Date	October 16, 2000

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 See 37 CFR §§ 1.27 and 1.28.*

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<b>METHOD OF PAYMENT (check one)</b>		<b>FEE CALCULATION (continued)</b>																																																																																																																																																	
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to: Deposit Account Number <u>23-2415 (Docket No. 18461-702)</u> Deposit Account Name <u>Wilson Sonsini Goodrich &amp; Rosati</u> <input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17 2. <input type="checkbox"/> Payment Enclosed: <input type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other		3. <b>ADDITIONAL FEES</b> <table border="1" style="width: 100%;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td></td> <td>130</td> <td>205</td> <td>65</td> <td>Surcharge - late filing fee or oath</td> <td></td> </tr> <tr> <td>113</td> <td>1,840</td> <td>113</td> <td>1,840</td> <td>Requesting publication of SR after Examiner action</td> <td></td> </tr> <tr> <td>115</td> <td>110</td> <td>215</td> <td>55</td> <td>Extension for reply within first month</td> <td></td> </tr> <tr> <td>116</td> <td>380</td> <td>216</td> <td>195</td> <td>Extension for reply within second month</td> <td>195.00</td> </tr> <tr> <td>117</td> <td>890</td> <td>217</td> <td>445</td> <td>Extension for reply within third month</td> <td></td> </tr> <tr> <td>118</td> <td>1,390</td> <td>218</td> <td>695</td> <td>Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>119</td> <td>310</td> <td>219</td> <td>155</td> <td>Notice of Appeal</td> <td></td> </tr> <tr> <td>120</td> <td>310</td> <td>220</td> <td>155</td> <td>Filing a brief in support of an appeal</td> <td></td> </tr> <tr> <td>121</td> <td>270</td> <td>221</td> <td>135</td> <td>Request for oral hearing</td> <td></td> </tr> <tr> <td>138</td> <td>1,510</td> <td>138</td> <td>1,510</td> <td>Petition to institute a public use proceeding</td> <td></td> </tr> <tr> <td>140</td> <td>110</td> <td>240</td> <td>55</td> <td>Petition to revive - unavoidable</td> <td></td> </tr> <tr> <td>141</td> <td>1,240</td> <td>241</td> <td>620</td> <td>Petition to revive - unintentional</td> <td></td> </tr> <tr> <td>142</td> <td>1,240</td> <td>242</td> <td>620</td> <td>Utility issue fee (or reissue)</td> <td></td> </tr> <tr> <td>143</td> <td>440</td> <td>243</td> <td>220</td> <td>Design issue fee</td> <td></td> </tr> <tr> <td>144</td> <td>600</td> <td>244</td> <td>300</td> <td>Plant issue fee</td> <td></td> </tr> <tr> <td>122</td> <td>130</td> <td>122</td> <td>130</td> <td>Petitions to the Commissioner</td> <td></td> </tr> <tr> <td>126</td> <td>240</td> <td>126</td> <td>240</td> <td>Submission of Information Disclosure Sheet</td> <td></td> </tr> <tr> <td>581</td> <td>40</td> <td>581</td> <td>40</td> <td>Recording each patent assignment per property (times number of properties)</td> <td></td> </tr> <tr> <td>146</td> <td>710</td> <td>246</td> <td>355</td> <td>Filing a submission after final rejection (37 CFR 1.129(a))</td> <td></td> </tr> <tr> <td>149</td> <td>710</td> <td>249</td> <td>355</td> <td>For each additional invention to be examined (37 CFR 1.129(b))</td> <td></td> </tr> <tr> <td colspan="4">Other fee (specify)</td> <td>25</td> <td>Request for Corrected Filing Receipt</td> </tr> <tr> <td colspan="4">Other fee (specify)</td> <td>55/110</td> <td>Terminal Disclaimer</td> </tr> <tr> <td colspan="5">* Reduced by Basic Filing Fee Paid</td> <td><b>SUBTOTAL (3)</b> (\$) 195.00</td> </tr> </tbody> </table>		Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid		130	205	65	Surcharge - late filing fee or oath		113	1,840	113	1,840	Requesting publication of SR after Examiner action		115	110	215	55	Extension for reply within first month		116	380	216	195	Extension for reply within second month	195.00	117	890	217	445	Extension for reply within third month		118	1,390	218	695	Extension for reply within fourth month		119	310	219	155	Notice of Appeal		120	310	220	155	Filing a brief in support of an appeal		121	270	221	135	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive - unavoidable		141	1,240	241	620	Petition to revive - unintentional		142	1,240	242	620	Utility issue fee (or reissue)		143	440	243	220	Design issue fee		144	600	244	300	Plant issue fee		122	130	122	130	Petitions to the Commissioner		126	240	126	240	Submission of Information Disclosure Sheet		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	710	246	355	Filing a submission after final rejection (37 CFR 1.129(a))		149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))		Other fee (specify)				25	Request for Corrected Filing Receipt	Other fee (specify)				55/110	Terminal Disclaimer	* Reduced by Basic Filing Fee Paid					<b>SUBTOTAL (3)</b> (\$) 195.00
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<b>1. BASIC FILING FEE</b> <table border="1" style="width: 100%;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>101</td> <td>710</td> <td>201</td> <td>355</td> <td>Utility filing fee</td> <td></td> </tr> <tr> <td>106</td> <td>320</td> <td>206</td> <td>160</td> <td>Design filing fee</td> <td></td> </tr> <tr> <td>107</td> <td>490</td> <td>207</td> <td>245</td> <td>Plant filing fee</td> <td></td> </tr> <tr> <td>108</td> <td>710</td> <td>208</td> <td>355</td> <td>Reissue filing fee</td> <td></td> </tr> <tr> <td>114</td> <td>150</td> <td>214</td> <td>75</td> <td>Provisional filing fee</td> <td></td> </tr> <tr> <td colspan="5"><b>SUBTOTAL (1)</b></td> <td>0.00</td> </tr> </tbody> </table>		Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid	101	710	201	355	Utility filing fee		106	320	206	160	Design filing fee		107	490	207	245	Plant filing fee		108	710	208	355	Reissue filing fee		114	150	214	75	Provisional filing fee		<b>SUBTOTAL (1)</b>					0.00	<b>2. EXTRA CLAIM FEES</b> <table border="1" style="width: 100%;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>103</td> <td>18</td> <td>203</td> <td>9</td> <td>Claims in excess of 20</td> <td></td> </tr> <tr> <td>102</td> <td>80</td> <td>202</td> <td>40</td> <td>Independent claims in excess of 3</td> <td></td> </tr> <tr> <td>104</td> <td>270</td> <td>204</td> <td>135</td> <td>Multiple dependent claim, if not paid</td> <td></td> </tr> <tr> <td>109</td> <td>80</td> <td>209</td> <td>40</td> <td>**Reissue independent claims over original patent</td> <td></td> </tr> <tr> <td>110</td> <td>18</td> <td>210</td> <td>9</td> <td>**Reissue claims in excess of 20 and over original patent</td> <td></td> </tr> <tr> <td colspan="5"><b>SUBTOTAL (2)</b></td> <td>240.00</td> </tr> </tbody> </table>		Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid	103	18	203	9	Claims in excess of 20		102	80	202	40	Independent claims in excess of 3		104	270	204	135	Multiple dependent claim, if not paid		109	80	209	40	**Reissue independent claims over original patent		110	18	210	9	**Reissue claims in excess of 20 and over original patent		<b>SUBTOTAL (2)</b>					240.00																																																												
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**SUBMITTED BY**

Name (Print/Type)	Van Mahamedi	Registration No. (Attorney/Agent)	42,828	Telephone	650-493-9300
Signature	<i>Van Mahamedi</i>	Date	10/16/2000		

**Complete (if applicable)**

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

# **EXHIBIT 23**

<b>Notice of Allowability</b>	Application No. <b>08/824,142</b>	Applicant(s) <b>Jang</b>	
	Examiner <b>Dinh Nguyen</b>	Group Art Unit <b>3738</b>	

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☒ This communication is responsive to the amendment dated 10-20-00

☒ The allowed claim(s) is/are 1-3, 5, 7, 9-11, 13, 17, 19-22, 49, 60, 63-69, 72, 84, and 85

☐ The drawings filed on \_\_\_\_\_ are acceptable.

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All   ☐ Some\*   ☐ None   of the CERTIFIED copies of the priority documents have been  
☐ received.  
☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_  
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☒ Applicant MUST submit NEW FORMAL DRAWINGS

☒ because the originally filed drawings were declared by applicant to be informal.  
☐ including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. \_\_\_\_\_  
☐ including changes required by the proposed drawing correction filed on \_\_\_\_\_, which has been approved by the examiner.  
☐ including changes required by the attached Examiner's Amendment/Comment.

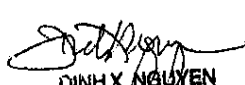
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)

☐ Notice of References Cited, PTO-892  
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_  
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948  
☐ Notice of Informal Patent Application, PTO-152  
☐ Interview Summary, PTO-413  
☒ Examiner's Amendment/Comment  
☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material  
☐ Examiner's Statement of Reasons for Allowance

  
**DINH X. NGUYEN**  
**PRIMARY EXAMINER**

Application/Control Number: 08/824,142

Page 2

Art Unit: 3738

**Examiner's Amendment**

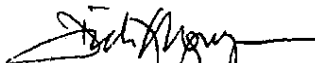
An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

✓ Cancel the non-elected claims, claims 4, 6, 8 and 75-83.

✓ In claim 63, at line 1, delete "55" and insert --49-- therefor.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Van Mahamedi on January 22, 2001.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh X. Nguyen whose telephone number is (703) 305-3522.

  
DINH X. NGUYEN  
PRIMARY EXAMINER

January 22, 2001

**ATTACHMENT TO AND MODIFICATION OF**  
**NOTICE OF ALLOWABILITY (PTO-37)**  
**(November, 2000)**

NO EXTENSIONS OF TIME ARE PERMITTED TO FILE  
CORRECTED OR FORMAL DRAWINGS, OR A SUBSTITUTE  
OATH OR DECLARATION, notwithstanding any indication to the  
contrary in the attached Notice of Allowability (PTO-37)

If the following language appears on the attached Notice of Allowability, the  
portion lined through below is of no force and effect and is to be ignored<sup>1</sup>

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to  
EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to comply will result in  
ABANDONMENT of this application. ~~Extensions of time may be obtained under the provisions of 37 CFR 1.136.~~

Similar language appearing in any attachments to the Notice of Allowability,  
such as in an Examiner's Amendment/Comment or in a Notice of  
Draftperson's Patent Drawing Review, PTO-948, is also to be ignored.

<sup>1</sup> The language which is crossed out is contrary to amended 37 CFR 1.84(c) and 1.136. See "Changes to  
Implement the Patent Business Goals", 65 Fed. Reg. 54603, 54629, 54641, 54670, 54674 (September 8,  
2000), 1238 Off. Gaz. Pat. Office 77, 99, 110, 135, 139 (September 19, 2000).



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

#23

# NOTICE OF ALLOWANCE AND ISSUE FEE DUE

0012/0135  
WILSON SONSINI GOODRICH ROSATI  
650 PAGE MILL ROAD  
PALO ALTO CA 94304-1050

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/824,142	03/25/97	026	NGUYEN, D	3738 01/25/01
First Named Applicant	JANG,	35 (160) 154(b) term ext. =	0 Days.	

TITLE OF INVENTION INTRAVASCULAR STENT

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPL. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3 17828-707	623-001.120	806	UTILITY	NO	\$1240.00	04/25/01

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

## HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above.  
If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or  
B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or

- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

- II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

- III. All communications regarding this application must give application number and batch number.  
Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PATENT AND TRADEMARK OFFICE COPY

# **EXHIBIT 24**



Applicant's Docket No. 18461-702

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Jang  
Serial No.: 08/824,142  
Filed: March 25, 1997  
For: INTRAVASCULAR STENT

Group: 3738  
Examiner: Nguyen, D.  
Batch: B06

BOX ISSUE FEE  
Commissioner for Patents  
Washington, D.C. 20231

TRANSMITTAL OF NEW DRAWING(S) TO CORRECT INFORMALITIES  
WITHIN THREE MONTH PERIOD OF RESPONSE SET  
IN NOTICE OF ALLOWABILITY (PTOL 37)

SUBMISSION OF DRAWING(S)

1. To correct the informalities in the drawings as noted in the Draftsman's objection(s) on PTO-948 and in accordance with the Notice of Allowability dated 01/25/2001, applicants submit herewith new drawing(s) for this application.

Number of sheets of drawings submitted: 14

2. The three month period of response set in the Notice of Allowability (PTOL 37) expires on 04/25/2001. This submission is on or before this expiry date.

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI

Paul Davis, Reg. No. 29,294

650 Page Mill Road  
Palo Alto, CA 94304  
(650) 493-9300  
Customer No. 021971

CERTIFICATE OF MAILING (37 C.F.R. 1.10)

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail (Label No.: EL 757 449 691 US) in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date indicated below.

Date: 4/16/01

Leilani Acosta

WARNING. "Facsimile transmissions are not permitted and if submitted will not be accorded a date of receipt" for "(4) Drawings submitted under 00 1.81, 1.83 through 1.85, 1.152, 1.165, 1.174, 1.437 ..." 37 C.F.R. 1.6(d)(4).

(Transmittal of New Drawing(s) to Correct Informalities Within Three Month Period of Response Set in Notice of Allowability[page 1])



6241760

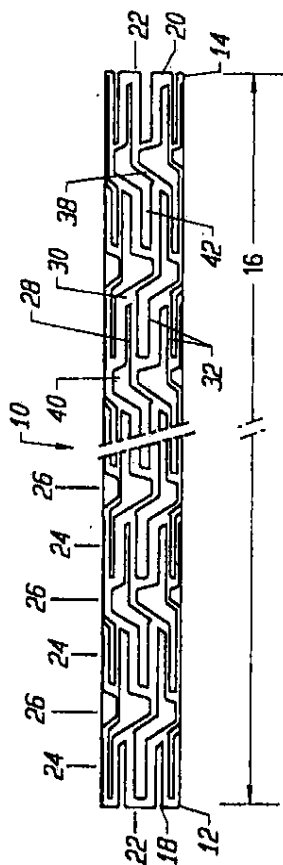


FIG. 1A

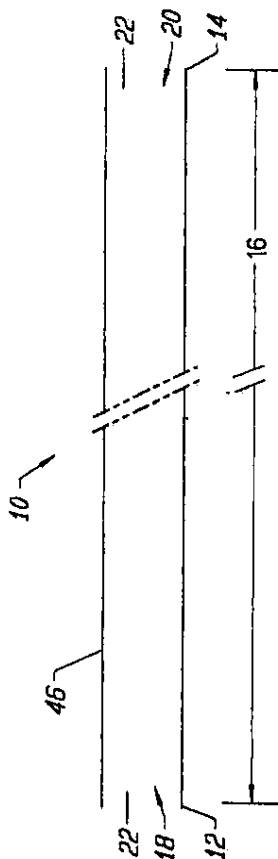


FIG. 1B

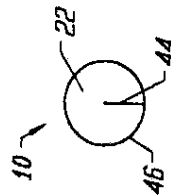


FIG. 1C

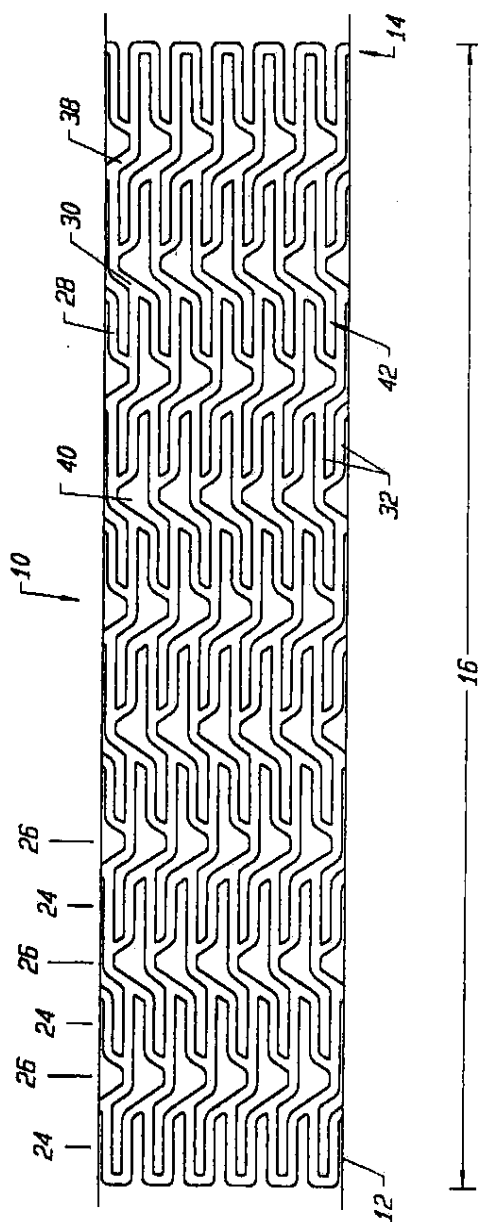


FIG. 2A

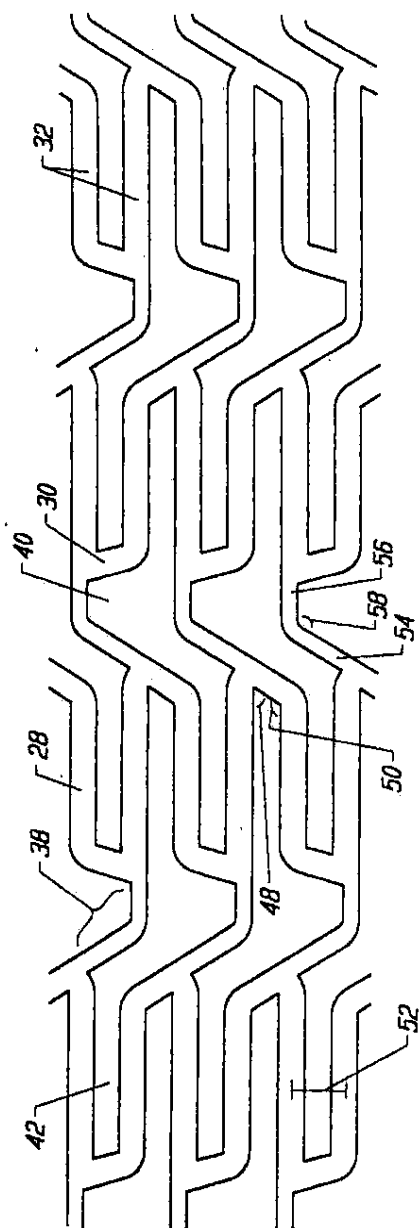


FIG. 2B

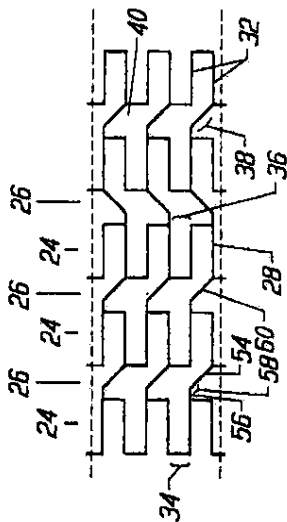


FIG. 3A

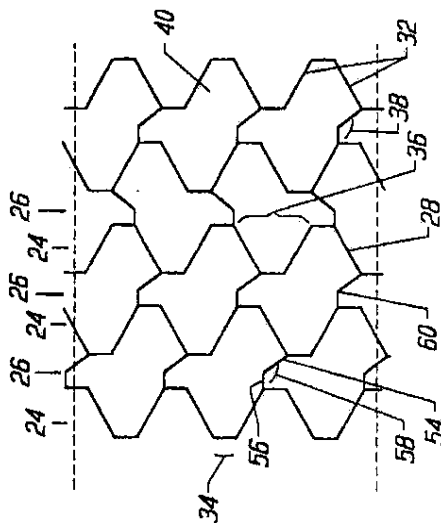
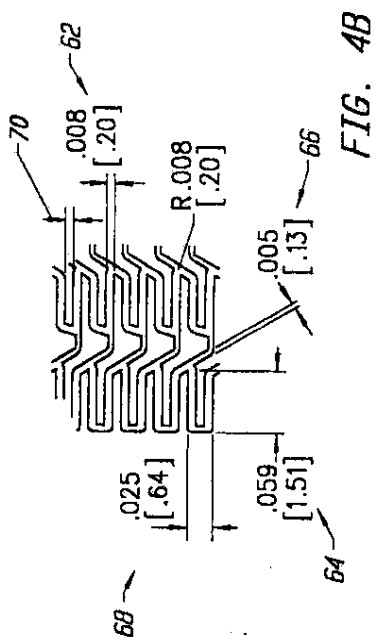
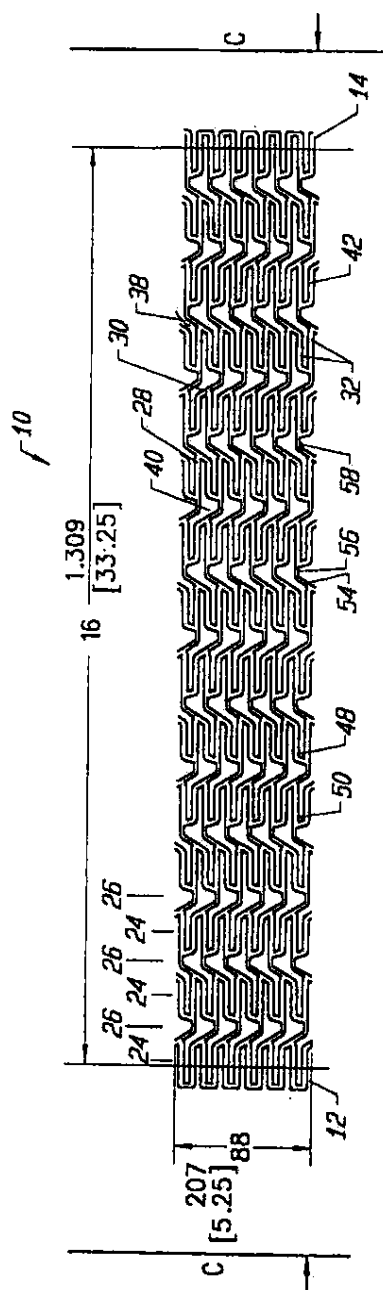


FIG. 3B



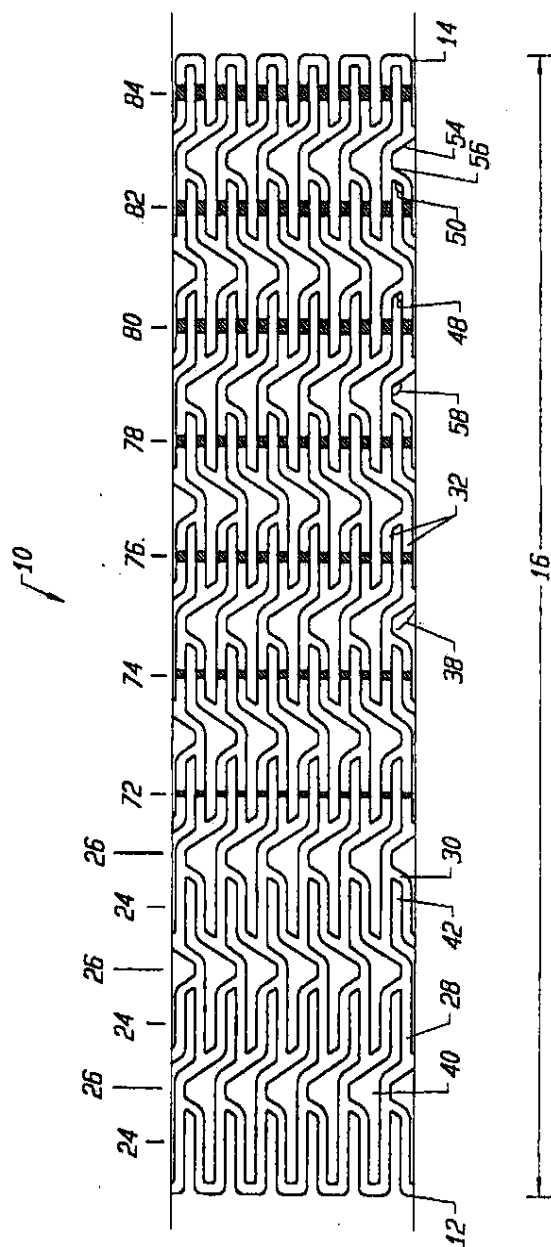
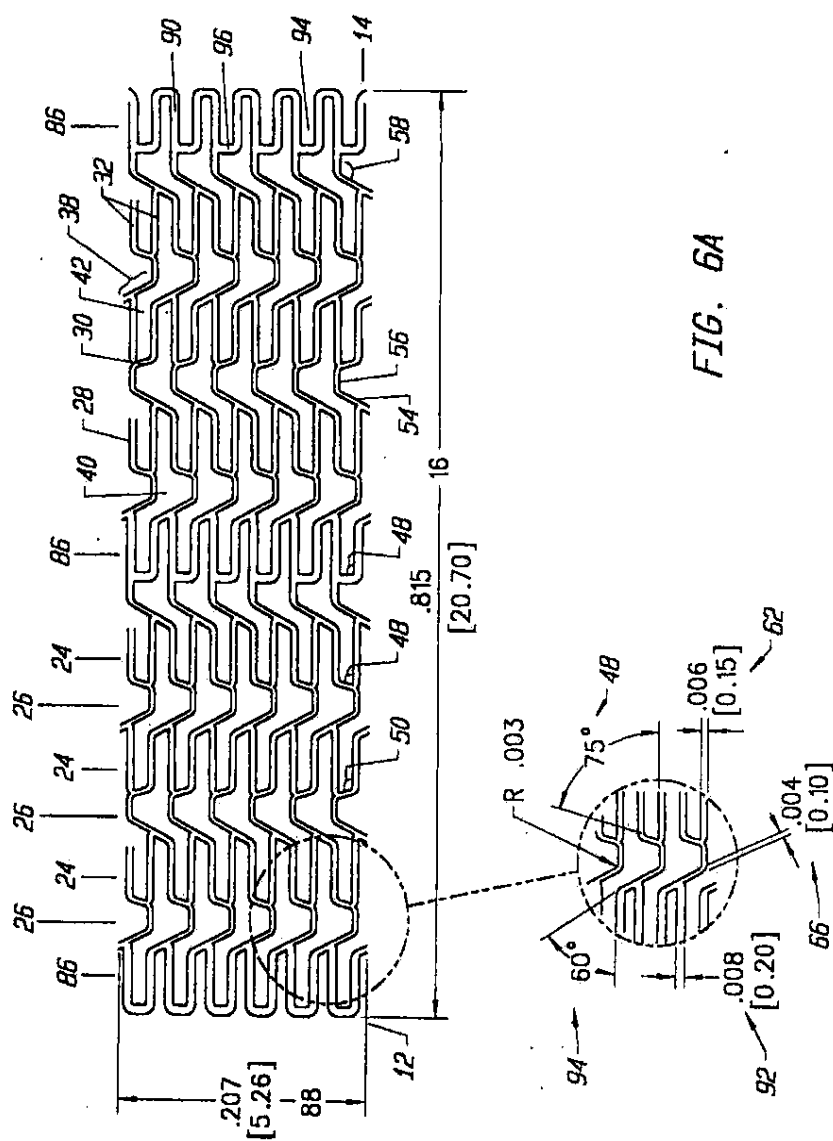


FIG. 5



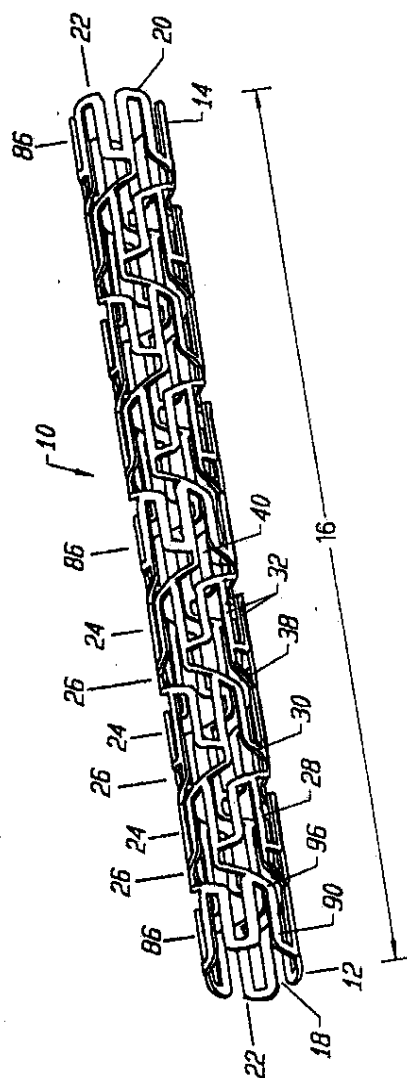


FIG. 6B



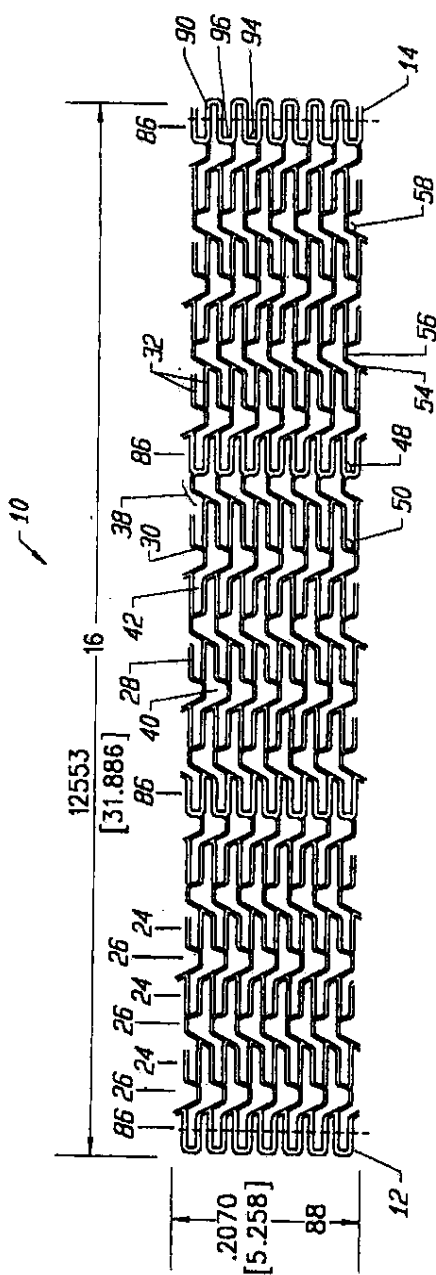


FIG. 7A

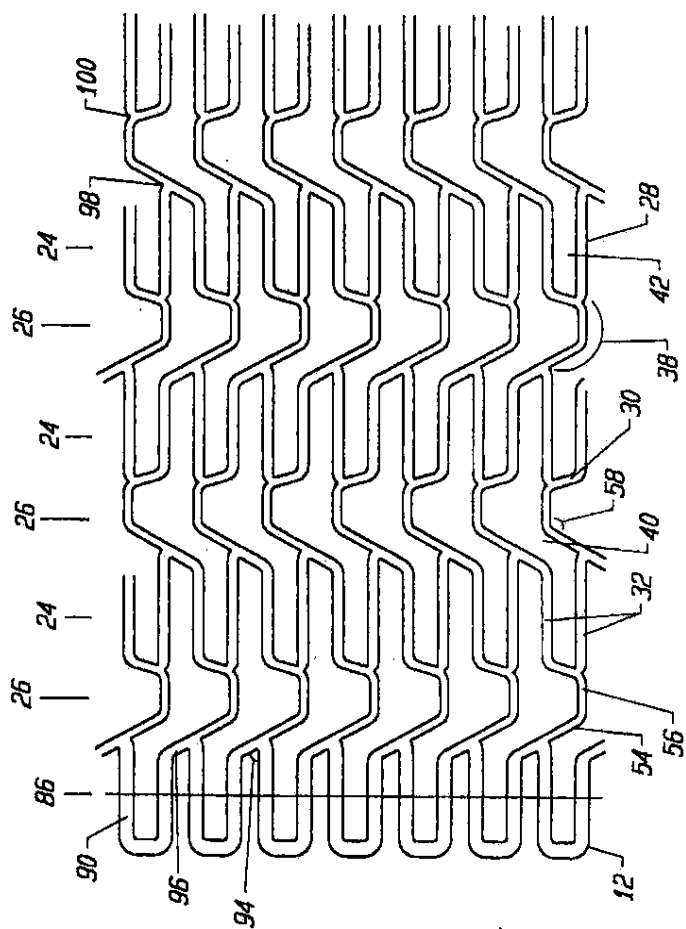


FIG. 7B

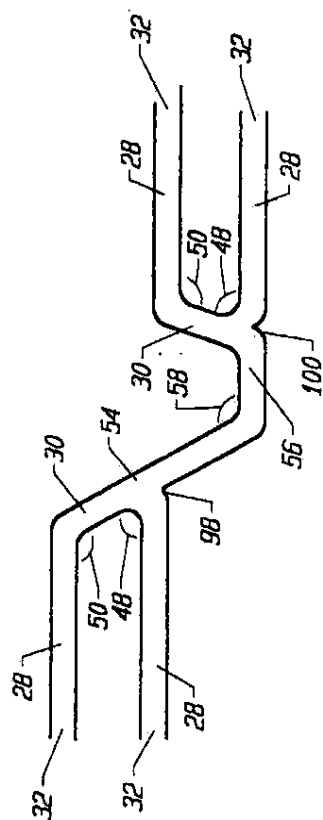


FIG. 7C

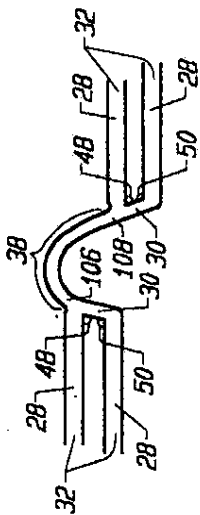


FIG. 8A

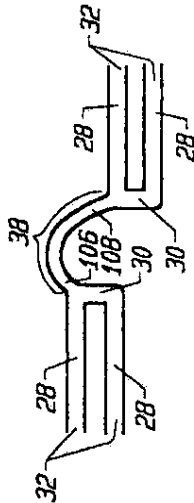


FIG. 8B

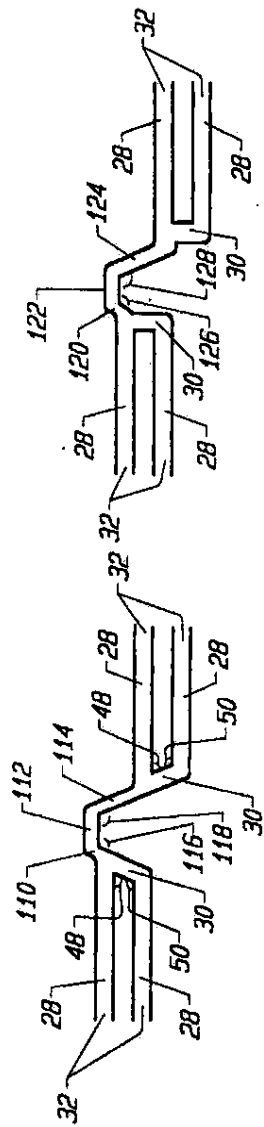


FIG. 8C

FIG. 8D

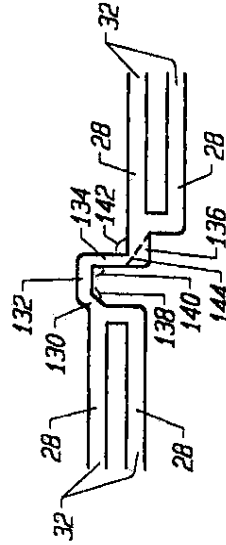


FIG. 8E

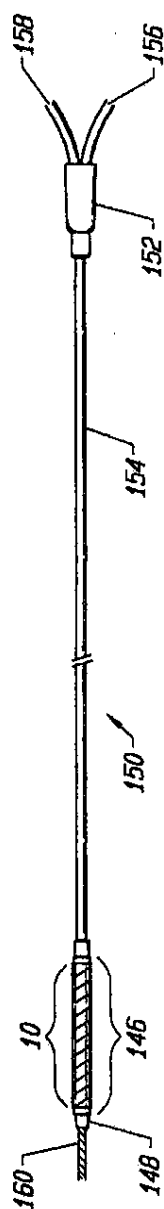


FIG. 9

## PART B—ISSUE FEE TRANSMITTAL

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**Assistant Commissioner for Patents**  
**Washington, D.C. 20231**

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**WILSON SONSINI GOODRICH ROSATI**  
**650 PAGE MILL ROAD**  
**PALO ALTO CA 94304-1050**

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*Wilson Sonsini Goodrich Rosati*  
 I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail (Label No.: **EL 757 449 141 US**) in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date indicated below.  
**4/16/01**

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/824,142	03/25/97	026	NGUYEN, D	3738 01/25/01
First Named Applicant: <b>JANG,</b> 35 USC 154(b) term ext. = 0 Days.				

**TITLE OF INVENTION** **INTRAVASCULAR STENT**

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3	17628-707	623-001.120	B06 UTILITY	NO	\$1240.00	04/25/01

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required.

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" indication form PTO/SB/47) attached.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. **Wilson Sonsini Goodrich & Rosati**  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE **G. David Jang**

(B) RESIDENCE (CITY & STATE OR COUNTRY) **Redlands, CA, US**

Please check the appropriate assignee category indicated below (will not be printed on the patent)

☐ Individual ☐ Corporation or other private group entity ☐ government

4a. The following fees are enclosed (make check payable to Commissioner of Patents and Trademarks):

☐ Issue Fee  
☐ Advance Order # of Copies \_\_\_\_\_

4b. The following fees or deficiency in these fees should be charged to:  
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☒ Advance Order - # of Copies **10**

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(Authorized Signature)

(Date)

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## PATENT COOPERATION TREATY

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13461-706  
P.D

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

(PCT Rule 44.1)

To:  
Wilson, Sonsini, Goodrich & Rosati  
Attn: DAVIS, Paul  
650 Page Mill Road  
Palo Alto, California 94304-1050  
UNITED STATES OF AMERICA

SEP 16 1997

WILSON, SONSINI,  
GOODRICH & ROSATIDate of mailing  
(day/month/year)

12/09/1997

Applicant's or agent's file reference 18461-706	WSQR PATENT DOCKET U.S.: FOREIGN: <input checked="" type="checkbox"/> <input type="checkbox"/>	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/US 97/06611	DOCKETED: 12/10/97 BY: [initials] ACTION: PCT-Search Report DUE DATES: Amend Abstract 10-12-97 Amend Claims 11-12-97	International filing date (day/month/year) 24/04/1997
Applicant JANG, G. David	ATTY: [initials] CAM # 18461-706	

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

## Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland  
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Further action(s): The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel. (+31-70) 340.2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340.3016

Authorized officer

Sabine Dekoninck



## NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under the Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

## INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

## What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

## When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

## Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

## How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

## What documents must/may accompany the amendments?

## Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

## NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:  
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:  
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:  
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or  
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:  
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

**"Statement under article 19(1)" (Rule 46.4)**

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

**Consequence if a demand for international preliminary examination has already been filed**

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

**Consequence with regard to translation of the international application for entry into the national phase**

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>18461-706</b>	<b>FOR FURTHER ACTION</b> <small>see Notification of Transmittal of International Search Report (Form PCT/ISA, 220) as well as, where applicable, item 5 below.</small>	
International application No. <b>PCT/US 97/06611</b>	International filing date (day, month, year) <b>24/04/1997</b>	(Earliest) Priority Date (day, month, year) <b>26/04/1996</b>
Applicant <b>JANG, G. David</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).
2. ☐ Unity of invention is lacking (see Box II).
3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
  - ☐ filed with the international application.
  - ☐ furnished by the applicant separately from the international application,
    - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
  - ☐ Transcribed by this Authority
4. With regard to the title, ☒ the text is approved as submitted by the applicant.  
☐ the text has been established by this Authority to read as follows:
5. With regard to the abstract, ☒ the text is approved as submitted by the applicant.  
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:  
 Figure No. 3B, 3A ☐ as suggested by the applicant. ☐ None of the figures.  
☒ because the applicant failed to suggest a figure.  
☐ because this figure better characterizes the invention.

## INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/US 97/06611A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 A61F2/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 449 373 A (PINCHASIK ET AL.) 12 September 1995	1-9, 11, 13, 18, 19, 25-33, 35, 37, 42, 43, 49-53, 55, 57, 62, 63, 81
Y	see the whole document	16, 21, 40, 45, 60, 65, 71, 72, 79, 80

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "A" document member of the same patent family

Date of the actual completion of the international search

1 September 1997

Date of mailing of the international search report

12. 09. 97

Name and mailing address of the ISA

European Patent Office, P.B. 5018 Patentlaan 1  
NL - 2280 HV Rijswijk  
Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+ 31-70) 340-3016

Authorized officer

Hagberg, A

## INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/US 97/06611

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	EP 0 709 067 A (MEDINOL) 1 May 1996  see the whole document ---	1-9,11, 13,18, 19, 25-33, 35,37, 42,43, 49-53, 55,57, 62,63,81
P,X	WO 96 26689 A (SCIMED LIFE SYSTEMS) 6 September 1996 see page 4, line 1 - page 5, line 3; figures ---	1
P,Y	DE 296 08 037 U (SITOMED) 11 July 1996 see the whole document ---	16,40,60
Y	EP 0 679 372 A (ADVANCED CARDIOVASCULAR SYSTEMS) 2 November 1995 see abstract; figures ---	21,45,65
Y	EP 0 587 197 A (ANGIOMED) 16 March 1994 see column 2, line 52 - line 56; figure 2 -----	71,72, 79,80

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US 97/06611

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5449373 A	12-09-95	WO 9633671 A AU 2427995 A DE 19581506 T	31-10-96 18-11-96 21-08-97
EP 709067 A	01-05-96	AU 3451595 A BR 9504561 A CA 2161509 A JP 8206226 A	09-05-96 25-02-97 28-04-96 13-08-96
WO 9626689 A	06-09-96	CA 2186029 A EP 0758216 A	06-09-96 19-02-97
DE 29608037 U	11-07-96	NONE	
EP 679372 A	02-11-95	CA 2147709 A JP 8126704 A	26-10-95 21-05-96
EP 587197 A	16-03-94	DE 9014230 U AT 107495 T DE 9116936 U DE 59102001 D EP 0481365 A ES 2057709 T JP 4256759 A	21-11-91 15-07-94 01-09-94 28-07-94 22-04-92 16-10-94 11-09-92

PATENT APPLICATION FEE DETERMINATION RECORD					Application or Docket Number		
Effective October 1, 1996					08/22/4142		
<b>CLAIMS AS FILED - PART I</b>							
(Column 1)		(Column 2)		SMALL ENTITY		OR	
FOR	NUMBER FILED	NUMBER EXTRA		RATE	FEE	OTHER THAN SMALL ENTITY	
BASIC FEE					385.00		
TOTAL CLAIMS	74	minus 20 =	54	x\$11=		x\$22= 1188	
INDEPENDENT CLAIMS	3	minus 3 =		x40=		x80=	
MULTIPLE DEPENDENT CLAIM PRESENT				+130=		+260=	
				TOTAL		TOTAL	
* If the difference in column 1 is less than zero, enter "0" in column 2							
<b>CLAIMS AS AMENDED - PART II</b>							
(Column 1)		(Column 2)		SMALL ENTITY		OR	
(Column 3)		(Column 4)		OTHER THAN SMALL ENTITY			
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
	Total	37	Minus	14	=	x\$22=	
	Independent	3	Minus	3	=	x80=	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+130=		+260=	
				TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
	Total	*	Minus	**	=	x\$22=	
	Independent	*	Minus	***	=	x80=	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+130=		+260=	
				TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
	Total	*	Minus	**	=	x\$22=	
	Independent	*	Minus	***	=	x80=	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+130=		+260=	
				TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  
 \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."  
 \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."  
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

PATENT APPLICATION FEE DETERMINATION RECORD Effective November 10, 1998				Application or Docket Number <div style="font-size: 1.2em; font-family: cursive;">08/874,142</div>	
<b>CLAIMS AS FILED - PART I</b>					
(Column 1)		(Column 2)			
FOR	NUMBER FILED	NUMBER EXTRA			
BASIC FEE					
TOTAL CLAIMS		72 minus 20 =		* 52	
INDEPENDENT CLAIMS		5 minus 3 =		* 2	
MULTIPLE DEPENDENT CLAIM PRESENT					
* If the difference in column 1 is less than zero, enter "0" in column 2					
<b>CLAIMS AS AMENDED - PART II</b>					
(Column 1)		(Column 2)		(Column 3)	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
Total	*	Minus	**	=	
Independent	*	Minus	***	=	
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					
(Column 1)		(Column 2)		(Column 3)	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
Total	*	Minus	**	=	
Independent	*	Minus	***	=	
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					
(Column 1)		(Column 2)		(Column 3)	
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
Total	*	Minus	**	=	
Independent	*	Minus	***	=	
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>					

SMALL ENTITY TYPE <input type="checkbox"/>		OR	OTHER THAN SMALL ENTITY	
RATE	FEE		RATE	FEE
	380.00	OR		760.00
X\$ 9=		OR	X\$18=	936.00
X39=		OR	X78=	156.00
+130=		OR	+260=	
TOTAL		OR	TOTAL	1852

SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
RATE	ADDI- TIONAL FEE		RATE	ADDI- TIONAL FEE
X\$ 9=		OR	X\$18=	
X39=		OR	X78=	
+130=		OR	+260=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
RATE	ADDI- TIONAL FEE		RATE	ADDI- TIONAL FEE
X\$ 9=		OR	X\$18=	
X39=		OR	X78=	
+130=		OR	+260=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	